

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

MARTIN H. LEAF,
An individual citizen of Michigan,

Plaintiff.

Case No.

v.

NIKE INC.,
An Oregon Corporation,

WIEDEN + KENNEDY,
An Oregon Corporation,

FACEBOOK INC.,
A Delaware Corporation,

GOOGLE LLC,
A Delaware limited liability company,

YOUTUBE, L.L.C.,
A Delaware limited liability company,

TWITTER, INC., A Delaware corporation,

Defendants.

**COMPLAINT AND
REQUEST FOR
DECLARATORY AND
INJUNCTIVE RELIEF**

**COMPLAINT, REQUEST FOR DECLARATORY AND INJUNCTIVE
RELIEF AND DEMAND FOR JURY TRIAL**

COMPLAINT

"For once, Don't Do It. Don't pretend there's not a problem in America. Don't turn your back on racism."

- Nike and Weiden + Kennedy Ad professing concern for alleged racism by America after the death of George Floyd.

"Let me be as clear as I can: Nike is opposed to bigotry."

- Nike C.E.O. John Donahoe May 29, 2020

INTRODUCTION

Our First Amendment allows persons to express their Jew-hatred virtually without restrictions. Here Defendants – all businesses – are promoting an advertisement/film – *The Last Game*, "The Video" - that is engineered to leverage racial Jew-hatred to make more money in a sneaky way that exploits existing racial Jew-hatred, exploits the consumer's ability to understand that this is taking place, and has the potential to increase racial Jew-hatred and its attendant criminal violence against people born Jewish. This sneaky, manipulative advertisement/film was developed illegally, as explained herein.

The First Amendment does not protect such deceptive commercial messages, and the Michigan Consumer Protection Act provides a remedy for such harmful, exploitive deception, provided that our institutions stop unjustifiably green-lighting such commercial products only because such illegal, racist offenses *today* are alleged to be only against Jews.

These techniques can, will, and are being used to illegally promote other illegal, harmful agendas. Viewing the evidence honestly, applying common sense and the law fairly, clearly mandates the relief requested herein.

PARTIES

1. Defendant Facebook is a Delaware corporation with principal offices in Palo Alto, California, and streams *The Last Game* – “The Video.”

2. Defendant Wieden + Kennedy is an Oregon corporation with principal offices in Portland, Oregon, and created The Video for Defendant Nike. The Video is currently being streamed on its website - <https://www.wk.com/work/nike-risk-everything> Retrieved June 3, 2018.

3. Defendant Nike is an Oregon corporation, with principal offices in Beaverton Oregon, and paid defendant Wieden + Kennedy to create *The Last Game* for defendant Nike – who also co-created The Video. The Video is currently being streamed on defendant Nike’s Facebook page, and on other websites it controls.

4. Defendant Google L.L.C. is a Delaware limited liability company with its principal place of business in Mountain View, California. Google L.L.C. transacts or has transacted business in this district and throughout the United States. At all times material to this Complaint, acting alone or in

concert with others, Google L.L.C. has advertised, marketed, and distributed its YouTube video sharing platform to consumers throughout the United States, including Michigan . At all times material to this Complaint, acting alone or in concert with Defendant YouTube, L.L.C., Google L.L.C. formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

5. Defendant YouTube, L.L.C. is a Delaware limited liability company with its principal place of business in San Bruno, California, and is a wholly owned subsidiary of Google L.L.C. YouTube, L.L.C. transacts or has transacted business in this district and throughout the United States. At all times material to this Complaint, acting alone or in concert with Defendant Google L.L.C., YouTube, L.L.C. has advertised, marketed, and distributed its YouTube video sharing platform to consumers throughout the United States. At all times material to this Complaint, acting alone or in concert with Defendant Google L.L.C., YouTube, L.L.C. formulated, directed, controlled, had the authority to control, or participated in the acts and practices set forth in this Complaint.

6. Defendant Twitter Inc. is a Delaware corporation with its principal place of business in California and transacts or has transacted business in this district and throughout the United States. At all times material to this

Complaint, Twitter Inc. has promoted or displayed *The Last Game*. At all times material to this Complaint, formulated, directed, controlled, had the authority to control or participated in the acts and practices set forth in this Complaint.

7. Plaintiff Martin H. Leaf is a citizen of Michigan.

JURISDICTION AND VENUE

8. Subject matter jurisdiction is proper under 28 U.S.C. § 1332(a)(1) because the matter in controversy exceeds the sum of \$75,000.00, exclusive of interest and costs, and is between citizens of different states and foreign states, therefore there is complete diversity, 28 U.S.C. § 1332(a)(1). The matter in controversy exceeds the sum of seventy-five thousand dollars (\$75,000) for reasons, including but not limited to the fact that attorney fees are recoverable under the Michigan Consumer Protection Act, MCL 445.901 *et. seq.* (“MCPA”). Plaintiff is also requesting injunctive relief to protect the citizens of the State of Michigan.

9. The Plaintiff viewed *The Last Game* in Oakland County, Michigan. Therefore, venue is proper under 28 U.S.C. § 1391(b)(2) because a substantial part of the events giving rise to the claims asserted occurred within the Eastern District of Michigan.

10. The Court has jurisdiction to order a temporary restraining order or preliminary injunction to all Defendants to stop showing or promoting *The Last Game* for the reasons stated herein as provided for in the MCPA.

FACTS

11. Plaintiff incorporates all prior and subsequent paragraphs as though pled herein, and this is true for each paragraph in this pleading.

12. Jews are more likely in America to be victims of religious hate crimes than all other religions combined. <https://ucr.fbi.gov/hate-crime/2018/topic-pages/incidents-and-offenses> Retrieved June 3, 2020.

13. Jews are 2.6 times more likely per capita than African Americans to be a victim of a hate crime. *Id.*

14. A subliminal message is a message that is not perceived because it is presented too quickly to be consciously perceived or is presented too fast to be consciously perceived.

15. A non-conscious message is a message that is not consciously perceived by a viewer for numerous reasons, including but not limited to the fact that it is not noticed or because it is subliminal.

16. There is reason to believe that non-conscious messages affect behavior and beliefs. See Exhibit O, ¶¶ 80-92.

17. It is illegal for anyone, including Defendants, to test the effectiveness of *The Last Game's* deceptive non-conscious messages of hate because of the damage it can cause to the viewer by making them hate Jews. ¶ 93.

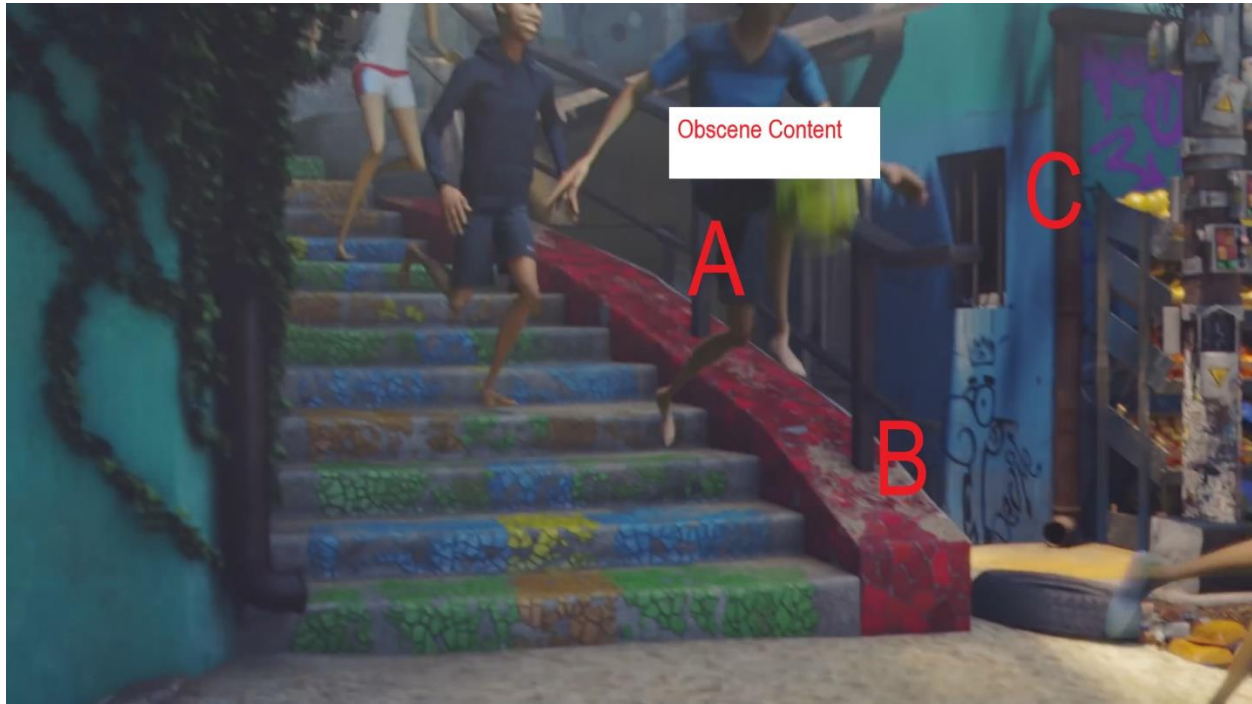
18. On or about June 11, 2014 Plaintiff Martin Leaf read an article discussing a new Nike "ad" as being anti-Semitic according to some, and not anti-Semitic according to others including the A.D.L. who declared that those alleging anti-Semitism were "certainly off base", and such false claims against Nike regarding anti-Semitism diminished the legitimate claims. [https://www.timesofisrael.com/adl-rejects-anti-Semitic racism-in-nike-ad/](https://www.timesofisrael.com/adl-rejects-anti-Semitic-racism-in-nike-ad/) retrieved June 3, 2020.

19. Shortly thereafter, Plaintiff went on You Tube, and viewed the Video on Nike's You Tube page.

<https://www.youtube.com/watch?v=ly1rumvo9xc> Retrieved October 6, 2018.

20. After *numerous* viewings Plaintiff determined that the Video was anti-Semitic and materially and deceptively so.

21. A frame is displayed in the Nike animated film/advertisement – seen by billions including and probably primarily children and adolescents - *The Last Game*. This individual frame is shown too fast to be consciously perceived.



22. The frame depicts an adolescent with an erect penis – “A”. The unmasked image is filed under seal. There is a hook-nosed figure with a crown on its head – “B”. In the lower right corner of “B” is the word “Devil”. The word “Devil” also forms an image of a Devil. There is a fuchsia Devil’s tail – “C”.



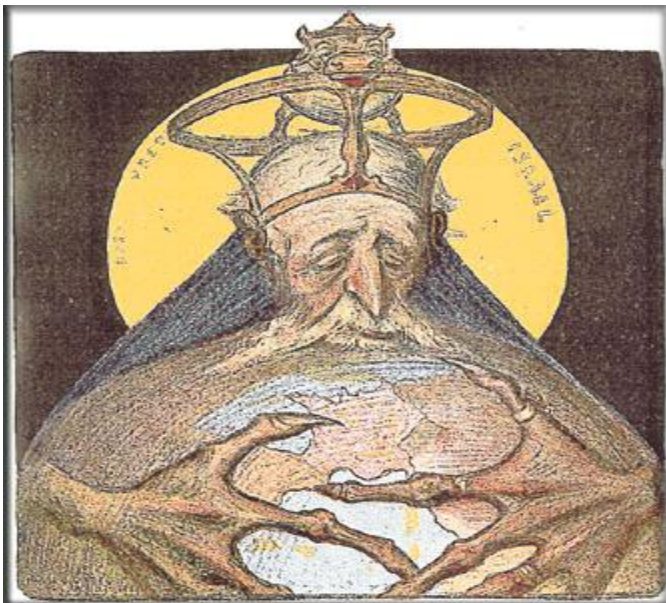
B. "Devil" is spelled out.



B. "Devil" is drawn.

23. The illegal erect penis – possibly child pornography since it depicts an adolescent in an erotic context - is displayed to draw the “mind’s attention” to the frame. The hooked nose figure with the crown and the Devil references is a common anti-Semitic trope of the Devil Jew controlling the world. The Devil’s tail, the crown-like depiction, and the embedded Devil image all reinforce in the mind the idea promoted in the Nike film that the Devil Jew controls the world to the detriment of the Gentile victim. All of this non-consciously and therefore deceptively.

24. Nazi Germany used the hooked nose Jew with a “Kike Crown” to incite Jew-Hatred.



Nazi Germany depiction of the Kike with Crown controlling the world.

25. Modern anti-Semitism also uses a non-conscious Kike Crown.



Jew with Kike Crown described in the film as ripping off Africans. From the B.B.C. anti-Semitic film McMafia

26. Throughout *The Last Game* there is an evil group that is taking over everything – including soccer and basketball - and ruining everything for everyone, including ruining the weather. This evil group wears a symbol that is *similar* but not identical to a Jewish star, and this ambiguity is deceptively deliberate.



Ambiguity of the logo drawn in as part of the deception.

27. However, other images quickly flashed and/or not noticed consciously, are intended to or have the potential to convince the mind that the evil guys are the Jews. For example, an Israeli flag is flashed very quickly.



Israeli flag quickly flashed.

28. A crucified Jesus is flashed very quickly. This is followed by a visible Jesus.



Crucified, Jesus flashed very quickly.

29. Crucified “good guys” are constantly flashed very quickly throughout The Video and are not noticed consciously.



One of many crucified good guys.

30. A skull-faced crucified “Jesus” with a Devil on his shoulder is also displayed non-consciously. This is non-conscious because it is not noticed unless pointed out.



Crucified “Jesus” with skull and Devil.

31. All of this and more is deceptively displayed as part of Nike's overall message that *if you buy Nike gear you can be the Gentile hero that saves the world by defeating the evil Jew Devil.*

32. In The Video the Gentile good guys get their Nike gear from Jesus before defeating the evil Jew Devils and thereby saving the world.



The good guys looking down from Christ The Redeemer after getting their Nike gear from Christ.

33. Of course given the realities of today's Jew-hatred, and recognizing the fact that 23% of blacks hold anti-Semitic views compared to 14% of non-blacks, Defendants Nike and Wieden + Kennedy deceptively exploit

the disproportionate Jew-hatred among blacks, including young adult blacks¹.

34. This exploitation is achieved by depicting “perfect LeBron” as a puppet/slave of the evil Jew Devils. He is finally “liberated” when the evil Jews are defeated.



Dreary scene of Perfect LeBron with Jewish logo

35. Nike’s message of hate is cleverly and deceptively promoted to impressionable children and adults in order to exploit the well documented

¹ https://www.adl.org/sites/default/files/documents/ADL_MS_Survey_Pres_1_25_17.pdf. Retrieved June 3, 2020.

obsessive Jew-hatred among soccer fans², and the disproportionate anti-Semitism among African Americans in order to sell more Nike gear.



Soccer fans.

36. Of course, American Jews are being “quietly” beaten up, murdered, and otherwise harmed because they are Jewish. Their houses of worship are being desecrated. Given all of this, Nike’s illegal exploitative and very sophisticated promotion of hatred is outrageous, even though profitable.

² <https://www.annefrank.org/en/about-us/research/social-research/research-on-antisemitism/antisemitism-football/> Retrieved June 3, 2020.

37. The full extent of the Video's material deception is still not known to Plaintiff, but some of the deception, including the significant non-conscious crowned Devil Jew Kike, as referenced above and herein, was not discovered until many months later.

38. Non-conscious techniques, such as those employed in *The Last Game*, are deceptive by their very nature³.

**COUNT I - AS TO DEFENDANTS NIKE,
WEIDEN + KENNEDY, GOOGLE AND YOU TUBE:**

Violation of the Michigan Consumer Protection Act, MCL 445.903(1)(s): Failing to reveal a material fact, the omission of which tends to mislead or deceive the consumer, and which fact could not reasonably be known by the consumer.

39. Plaintiff incorporates all prior paragraphs as though pled herein.

40. Defendants Nike, Wieden + Kennedy, Google, and YouTube failed to reveal the material fact that *The Last Game* - "The Video" - contains advanced messages of hate against Jews as alleged herein, including

1. FCC 74-78, *BROADCAST OF INFORMATION BY MEANS OF 'SUBLIMINAL PERCEPTION' TECHNIQUES*, issued January 24, 1974:

" We believe that the use of subliminal perception is inconsistent with the obligations of a licensee, and therefore we take this occasion to make clear that broadcasts employing such techniques are contrary to the public interest. **Whether effective or not, such broadcasts clearly are intended to be deceptive.**" [Emphasis added]

subliminal hate, non-conscious hate, subtle hate, and child pornography to further such hate promoted to billions including children and adolescents - “Implanted Hate”. This failure to reveal said material fact occurred *prior* to Plaintiff viewing the Video. Defendants Nike, Wieden + Kennedy, Google, and You Tube’s actions as described herein, were the direct and proximate cause of Plaintiff Leaf’s damages, and were foreseeable.

41. Plaintiff Leaf was damaged by mental distress, suffering emotional distress, outrage, humiliation and embarrassment because of the fact that public ostensibly respectable companies would work so hard to promote hatred of Jews including to children for reasons including to increase its profits. Such promotion of hate always leads to criminal violence against Jews. Furthermore, the potential for these deceptive, sneaky methods to get people to hate Jews and to act on such hatred increases the mental distress all defendants in this count caused.

42. Plaintiff Leaf would not have viewed the Video in the ordinary manner (or at all) had Plaintiff known the above material facts: That the Video contained Implanted Hate and that such Implanted Hate was potentially effective.

43. Plaintiff had no reasonable way of knowing the Video contained Implanted Hate.

44. Defendants for this count did not implement reasonable means, procedures or methods to prevent the actions alleged herein that are in violation of this section of the MCPA.

**COUNT II - AS TO DEFENDANTS NIKE, WIEDEN + KENNEDY,
GOOGLE AND YOU TUBE :**

**Violation of the Michigan Consumer Protection Act, MCL
445.903(1)(cc): Failing to reveal facts that are material to the
transaction in light of representations of fact made in a positive
manner.**

45. Plaintiff incorporates all prior paragraphs as though pled herein.

46. Plaintiff Leaf relied on the representation of fact, made in a positive way by all Defendants, that the Video was a five-minute Nike video product based on what was written on the YouTube web site Plaintiff Leaf viewed the Video on, including that the Video was a Nike video. Also, the Video indicated the fact it was produced by Nike which led Plaintiff to believe it would not contain Implanted Hate.

47. Based on the above Plaintiff Leaf had no reason to believe the Video contained Implanted Hate because after all, presumably fine ethical

American companies like Defendant Nike and its advertising company – Defendant Wieden + Kennedy - would never promote Implanted Hate.

48. Defendants actions as described herein were the direct and proximate cause of Plaintiff Leaf's damages.

49. Plaintiff had no reasonable way of knowing the Video contained Implanted Hate.

50. Defendants for this count did not implement reasonable means, procedures or methods to prevent the actions alleged herein that are in violation of this section of the MCPA.

51. Plaintiff Leaf was damaged by suffering emotional distress, humiliation and embarrassment after viewing the Video and finding out it was rife with Implanted Hate and anti-Semitic racism not much different than Nazi Germany would produce if it were in power today.

52. Plaintiff Leaf would not have viewed The Video in the ordinary manner had Plaintiff known the above material facts: That The Video contained said hateful messages and Implanted Hate and that such

Implanted Hate can be effective, including the details herein concerning how Implanted Hate is implemented in The Video.

JURY DEMAND

Plaintiff demands a jury for this matter.

**REQUEST FOR DECLARATORY JUDGMENT
AND INJUNCTIVE RELIEF**

In accordance with MCL §445.911(1)(a) Plaintiff requests that a declaratory judgment be issued stating that all Defendants are violating the MCPA by showing and/or promoting The Video for the reasons described herein.

Plaintiff also requests an injunction be issued, in accordance with MCL §445.911(1)(b), enjoining all Defendants from showing or disseminating or allowing *The Last Game* to be shown or disseminated without removing said subliminal, and non-conscious material messages that employ the deceptive method of Implanted Hate, and/or promote anti-Semitic racism, or in the alternative, that this Court require a warning regarding the Implanted Hate and anti-Semitic racism set forth in the Complaint because such content is deceptive, misleading, and potentially

harmful as explained herein. Without such injunctive relief all Defendants will continue to violate the Michigan Consumer Protection Act, MCL §445.903(1) *et Seq.*

RELIEF REQUESTED

Plaintiff requests reasonable attorney fees in accordance with MCL §445.911(2), statutory damages or actual damages, whichever is greater, actual costs, said injunctive and declaratory relief, and any other relief deemed appropriate by this Court.

Dated: June 3, 2020

Respectfully submitted,

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Herman Petzold(P41760)

INDEX OF EXHIBITS

<u>Exhibit</u>	<u>Description</u>
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- | | |
|-------|---|
| 0. | Affidavit of Dr. Michael Motley. |
| 0A. | Spider Study of Nonconscious |
| 1. | Dr. Motley's Academic Biography. |
| 2. | Elie Mosseri's Affidavit regarding the DVD submitted to the Oakland County Circuit Court. |
| 3. | Dr. Fran Parker's Affidavit regarding the alleged anti-Semitic and subliminal content in Drive. |
| 4. | Rabbi Bergstein's Affidavit regarding the alleged anti-Semitic content in Drive. |
| 5. | David Turner Affidavit regarding the alleged anti-Semitic content in Drive. |
| 6. | Email from Randy Bytwerk to Martin H. Leaf regarding the alleged anti-Semitic content in Drive. |
| 7. | Postings regarding Drive on the neo-Nazi website VNNFORUM.com. |
| 8. | Frame from Drive showing the alleged nonconscious "JC". |
| 9. | Frame from Drive showing "JC" highlighted, alleged faint Hebrew like letters in blood, open bag of money. |
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- 14-1. Still frame of Bernie Rose.
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- 34. Alleged Halo above Irene.
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- 36-2. Driver with shine.
- 36-3. Driver with shine.
- 36-4. Nonconscious Driver as Jesus.
- 37. Phallic symbol and mouth in frame from Refn's Manifesto commercial.
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- 39. Nonconscious cross in Manifesto.
- 40. Nonconscious cross and swastika in Manifesto.
- 41. Nonconscious cross in Manifesto.
- 42. Nonconscious cross in Manifesto.
- 43. Nonconscious image Jew being dragged through water (painting).
- 44. Jew Nino being drowned by skinhead Driver.
- 45. Double push (nonconscious) on door.
- 46. Nonconscious empty charity box at the Jew Nino's pizzeria.
- 47. Nonconscious empty charity box at the Jew Nino's pizzeria.
- 48. Nonconscious empty charity box at the Jew Nino's pizzeria.
- 49. Actor Oscar Isaac, frame from *Drive*.
- 50. Actor Oscar Isaac, not a frame from *Drive*.
- 51. Nonconscious "Monstrance", glass of wine, from *Drive*.

52. "Bad guys" from Nike's *The Last Game* with logos resembling Stars of David.

52-1. The Jew Nino, filthy and degraded.

53. Frame from *The Last Game*.

54. Frame from the last game with alleged nonconscious Israeli flag highlighted.

55. Bad guy with alleged Star of David, from Nike's *The Last Game*.

56. Star of David on bad guy's shoe, tripping good guy.

57 Anti-Semitic cartoon.

58. Jewish Stars surround bad guys' stadium from *The Last Game*.

59. Bad guys with symbols allegedly resembling Stars of David.

60. From Nike's *The Last Game* showing sinister bad guys with alleged Stars of David, versus the good guys framed in gold.

61. Alleged nonconscious Stars of David on bad guys stadium's seats.

62. Jewish Stars surround bad guys' stadium from *The Last Game*

63. From Nike's *The Last Game*.

64. Exhibit 63 highlighted.

65. Alleged nonconscious Star of David in the bad guy's eye, from *The Last Game*.

66. Jewish Stars surround bad guys' stadium from *The Last Game*.

67. Frame from *The Last Game* with text added.

68. Frame from *The Last Game* with text added.

69. Frame from *The Last Game* with text added depicting Labron James with an alleged Star of David.

70. Frame from Nike's *The Last Game*.

71. Close up of Exhibit 70.

72. Close up of Exhibit 70.
73. Exhibit 72 with alleged nonconscious "Devil" highlighted.
74. Subliminal frame of Christ the Redeemer, from Nike's *The Last Game*.
75. Frame from Nike's *The Last Game*.
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79. Frame from Nike's *The Last Game*, depicting alleged nonconscious crucified position.
80. Frame from Nike's *The Last Game*, depicting alleged nonconscious crucified position.
81. Frame from Nike's *The Last Game*, depicting alleged nonconscious crucified position.
- 81-2. Frame from Nike's *The Last Game*, depicting alleged nonconscious crucified position.
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83. Alleged nonconscious Monstrance, from Nike's *The Last Game*.
84. Frame from Nike's *The Last Game* with text added.
85. Frame from Nike's *The Last Game* with text added.
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- 87. Frame from *Drive*, showing gold watch and ring.
- 88. Frame from *Drive*, showing gold watch and ring.
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- 94-5. Nazi anti-Semitic poster, Jew as Devil.

EXHIBIT 0

AFFIDAVIT OF DR. MICHAEL T. MOTLEY

Having been duly sworn, the following is true to the best of my knowledge, information, and belief:

1. If called to the stand, I am competent to testify to the contents herein.
2. This Affidavit is based on my personal knowledge unless otherwise indicated.
3. I have attached my Curriculum Vitae as Exhibit 1.
4. I have viewed the motion picture *Drive*, including still frames from *Drive* provided to me by attorney Martin H. Leaf. The version I have primarily viewed is the Sony blu-ray DVD. However, I have also viewed still frames from the i-tunes version of *Drive*. The i-tunes version of *Drive* shows the entire hand of Bernie Rose after stabbing *Driver*. This appears to be the only difference between these versions relevant to this affidavit. I am also aware of a version of *Drive* filed by defendant FilmDistrict with the Oakland County Circuit Court that has significantly reduced resolution, and attenuated sound in addition to a watermark. This according to the Affidavit of Elie Mosseri, Exhibit 2.
5. I have read the descriptions of Bernie Rose and Nino that were on the official FilmDistrict *Drive* website that is no longer on the web. The descriptions are: (1) "Bernie is a small time mobster whose Jewish identity constantly informs his outsider status. A movie producer for a while, he realized crime was where he could make real money. His desire for recognition and profit brings him to invest in Shannon's stock car idea;" (2) "Nino's, real name is Izzy. As a Jew connected to the Italian mob, he is constantly aware of and self conscious about his real heritage, so much so that he's resorted to changing his name and operating an Italian Restaurant – "Nino's". This ambivalence about his identity makes Nino impulsive, violent, and crass, a temperamental opposite to his partner in crime Bernie Rose."
6. I have viewed two versions of the advertisement for Yves Saint Lauren's *Manifesto*, directed by Nikolas Winding Refn. <https://vimeo.com/71963667>
<https://vimeo.com/50360220>

7. I have viewed the Nike advertisement *The Last Game*, including still frames from *The Last Game* provided to me by attorney Martin H. Leaf.
<https://www.youtube.com/watch?v=ly1rumvo9xc>
8. I have watched the Nike advertisement *Good v Evil* at
<https://www.youtube.com/watch?v=834gDrY2Hd8>
9. I have viewed an interview of Nikolas Winding Refn the director of *Drive*, by David Poland from the following Web site:
<http://moviecitynews.com/2011/12/dp30-Drive-director-nikolas-winding-refn/> .
10. I have viewed another interview of Nikolas Winding Refn the director of *Drive*, on the following Web site: <https://vimeo.com/71967059>
11. I have read the Affidavits of Dr. Fran Parker, Rabbi Chaim Moshe Bergstein, and David Turner. Exhibits 3, 4, 5.
12. I have read the short story *Drive*, by James Sallis.
13. I have read the email from Randyl Bitwerk regarding *Drive*. Exhibit 6.
14. I have read posts regarding *Drive* on the internet, including posts from neo-Nazi sites such as VNN, Vanguard News Network. Exhibit 7¹.
15. I have watched the Nazi anti-Semitic film *Jud Suss*.
<https://www.youtube.com/watch?v=ZlvaBOxHDj0&bpctr=1441653638>
16. I have watched the Nazi anti-Semitic film *The Eternal Jew*.
<https://www.youtube.com/watch?v=RIHVin56U2w>
17. I have read the opinion of Oakland County Circuit Court judge Daniel Patrick O'Brien, in particular his statement that he initially did not notice the "JC" on the Bernie Rose Character until it was pointed out. Exhibits 8, 9, 10.
18. I have read an interim version of the screenplay for *Drive* at
<http://www.imsdb.com/scripts/Drive.html>
19. As used herein, anti-Semitism means hatred of Jews and/or Judaism.
20. As used herein, an anti-Semitic message manifests and/or promotes hatred of Jews and/or Judaism.

¹ The murderer of three people in Kansas City, at two Jewish sites, the Jewish Center, and Village Shalom was committed by Frazier Glenn Miller on April 13, 2014. Miller was a frequent poster, and someone admired on VNN <http://vnnforum.com/showthread.php?t=104273>.

21. As used herein, anti-Christian messages are messages that use symbols, icons and principles of Christianity to justify and promote hatred of Jews and Judaism, and physical harm to Jews. While these are normally Christian messages, they are referred to as anti-Christian because they are being used here to promote hate and other principles that are counter to Christian teachings.
22. As used herein “the mind” refers to both the non-conscious and conscious processes and corresponding anatomical parts of the brain.
23. **Based on the above, the following is my opinion.**
24. **It is clear that the motion picture *Drive* conveys anti-Semitic messages intended not to be perceived consciously. These intended non-conscious messages are also most likely, in fact, not perceived consciously.** When this document refers to non-conscious messages and stimuli, the implication is that these are not consciously perceived by the viewer; not that their insertion into the film was done non-consciously.
25. **These non-conscious anti-Semitic messages are combined with subtle anti-Semitic messages, throughout *Drive*.**
26. **It is clear that the motion picture *Drive* conveys anti-Christian messages intended not to be perceived consciously. These intended non-conscious messages are also most likely not perceived consciously.**
27. **These non-conscious anti-Christian messages are combined with subtle anti-Christian messages throughout *Drive*.**
28. **All of the anti-Christian and anti-Semitic messages, both conscious and non-conscious, also support the message that the good Christian must murder/defeat the Evil Jew.**
29. **The manner in which these anti-Semitic and anti-Christian messages are presented, including the subtle and non-conscious messages, results in anti-Semitic and anti-Christian messages being presented, virtually without the viewer’s knowledge or understanding that they are being exposed to such messages.**
30. **The *extent* (i.e. strength and length of time) of the effects of the aforementioned messages on the viewer’s behavior and beliefs is**

impossible to predict without rigorous scientific tests involving *Drive*, which to my knowledge have not been done.

31. The techniques used in the film to convey these anti-Semitic messages are primarily known as inattentional blindness, or perceptual blindness, as explained more fully below (See for example, https://www.youtube.com/watch?v=IGQmdoK_ZfY).
32. This technique involves placing an unexpected object, symbol, message, sound, or other stimulus in a scene from a given medium, with the intention that the viewer will not consciously notice that object, symbol, message, or stimulus, in part because the viewer or listener is focused on something else.
33. The scientific literature describes stimuli that are not noticed consciously because of inattentional blindness, as having an effect on behavior and beliefs.
34. A subliminal message is a message that is too faint, brief, or otherwise not possible to be perceived consciously, and also has an effect on behavior and beliefs.
35. Non-conscious messages include subliminal messages and messages that are not consciously perceived because of inattentional/perceptual blindness.
36. The scientific literature also describes stimuli that are not noticed consciously because of inattentional blindness as having a priming effect.
37. A priming effect is where one stimulus, the “prime”, effects how the mind processes another stimulus that occurs concurrent with or shortly after the prime.
38. A prime can be obvious, subtle, or non-consciously perceived.
39. **In the case of *Drive*, the primes set forth herein that are not consciously perceived due to the techniques described above are intended, and most likely do act, to enhance in the mind, the *subtle* anti-Semitic messages throughout the film.**
40. For example, the Star of David in Exhibits 11-1 and 11-2, acts as a prime for the subtle anti-Semitism that the Director Refn, appears to admit to regarding Kosher slaughter, based in part, on the David Poland interview².

² https://www.youtube.com/watch?v=5Vv0E_-Fi5g from 27:00 to 30:00. Refn says that he supposes that the knives represent Kosher Slaughter: “...I guess it comes from that, but what’s wrong with that?”

41. In the scene involving the Star of David, one of the Jewish characters is murdering a Gentile using many of the components of Jewish ritual slaughter.
42. The Star of David seems to have been intended to deceptively cause the viewer, without the viewer's awareness, to interpret the scene as an example of Judaism's murderous and cruel nature.
43. Likewise the non-conscious cross that appears next to the Gentile victim, Shannon, Exhibits 12-1 and 12-2, seems to have been intended to cause the viewer to interpret the scene, non-consciously, as "evil Judaism "murdering" Christianity" or "evil Judaism murdering a Christian saint". This non-conscious "saint" is the character Shannon.
44. Shannon is also portrayed non-consciously as a saint in a previous scene. Exhibit 13.
45. There is an obvious anti-Semitic shark symbol that the Jew Bernie Rose stands next to and refers to as his "name". The shark is an anti-Semitic stereotype of the Jew, and the fact that this symbol is not consciously perceived makes it likely that the non-conscious mind will make an association with Jews and Judaism as sharks. Exhibits 14-1, 14-2, 15, and 16.
46. There is a non-conscious trachea with blood spurting out, formed by Shannon's glasses and the string they are attached to, intended to further associate that scene with Kosher ritual since Kosher ritual severs the trachea. Exhibit 17. The Nazis used Kosher Slaughter as a justification to murder Jews, as evidenced by the relatively belabored and lengthy segment on Kosher slaughter in *The Eternal Jew*.
47. The knife that the Jew uses to murder the Christian, cuts across the Church steeple. This is a non-conscious message that Judaism is the enemy and harms Christians and Christianity, and probably acts as a prime that causes viewers to see the Jews and Judaism as the enemy of Christianity. See Exhibit 18, 19, 20.
48. The subtle and non-conscious anti-Semitic and anti-Christian messages in the two scenes, the murder and the treatment of the blade, convey the following messages: (1) Judaism is a cruel and sadistic religion as evidenced by their cruel

and sadistic rituals, e.g. Kosher Slaughter; (2) Jews are evil, Saint Murderers, and the enemies of Christianity.

- 49.** Because the two aforementioned scenes depict most of the elements of Kosher Slaughter it is likely that viewers will be prejudiced against Kosher Slaughter, without realizing it, should the issue come up at a later time - for example in the context of ongoing attempts to outlaw Kosher Slaughter. Exhibit 21.

<http://www.independent.co.uk/news/world/europe/denmark-bans-halal-and-kosher-slaughter-as-minister-says-animal-rights-come-before-religion-9135580.html>

- 50.** There is also a subtle message that the arguments used by proponents of Kosher Slaughter (e.g. that it is painless and quick) are lies because Shannon is obviously suffering and aware that he is dying despite Rose's assurances that it is over and that there is no pain. This subtle message, combined with the non-conscious messages, are very likely to have a prejudicial effect on the viewer that the two scenes might have against Kosher Slaughter.
- 51.** Exhibits 22- 33 are examples of deceptive anti-Christian non-conscious messages that the victims of the Jews are Christian and holy. This further promotes the message, also as a prime, that Jews and Judaism are the enemy of the Gentile viewer, and that the Gentile must defeat/murder the Jew. Note all of the Halos, glows, and crosses that are normally not expected.
- 52.** Exhibit 34 show that there is no source of light or shadow for the non-conscious subliminal cross that appears in Exhibit 22-1 and 22-2, which is highlighted.
- 53.** Exhibit 35-2 contains a non-conscious halo, conveying the anti-Semitic, anti-Christian message that it is a Christian Saint murdering the Jew.
- 54.** Exhibit 36 has a banner that says "The shine that gets noticed." This is an attempt to draw the mind's attention to the numerous halos, and other shines (e.g. radiant light that envelopes the head of the Ryan Gosling character *Driver*). Here I am assuming that this sign was either specifically created for this purpose, or the scene was set up to intentionally include this sign for the purpose described in this paragraph. Further discovery might resolve this issue.

55. These images, Exhibits 22-36, as well as many others, appear to be the result of **deliberate** attempts to convey non-conscious messages, by someone skilled in creating non-conscious messages.
56. The advertisement *Manifesto*, by the Director Refn, manifests such skill.
57. The *Manifesto* advertisement contains an obvious non-conscious depiction of felatio. Exhibits 37, 38. There is a study that has shown that subliminal sexual images cause female viewers to pay more attention to the advertisement³.
58. There are obvious non-conscious Crosses throughout the *Manifesto* advertisement, which would presumably prime the concept of "Saint," as in Yves Saint Laurent. Exhibits 39, 40, 41, 42.
59. Another version of the *Manifesto* advertisement is identical to the aforementioned version, however, it is missing the non-conscious depiction of the felatio⁴.
60. Exhibit 8, 9 and 43 are anti-Semitic frames from *Drive* that uses non-conscious messages to promote anti-Semitism and also utilizes anti-Christian non conscious messages.
61. The non-conscious anti-Semitic messages in Exhibit 8 and 9 include the "JC," on the Jew Bernie Rose's shirt. In context, this most likely acts as a prime for the subtle message in the film that the Jews murdered Jesus. This is in part due to the fact that *Driver* is constantly imbued, throughout the film, with Christian symbols that represent Christian holiness and even Jesus, as explained more fully herein. See also Exhibits 36-2, 36-3, 36-4.
62. The dead Jew Rose is also lying in a crucified position, another subtle reference to Jesus.
63. There are non-conscious Hebrew like letters in blood on the hand of Rose. This is curious given the fact that Rose stabbed *Driver* with the other hand. It is more likely than not that the blood on the hand of the Jews, and the faint Hebrew

³ Gillath, Omri; Mikulincer, Mario; Birnbaum, Gurit E.; Shaver, Phillip R. (May 2007). "Does subliminal exposure to sexual stimuli have the same effects on men women?". *Journal of Sex Research*. 2 44: 111–121.

⁴ <https://vimeo.com/71963667> contains the objectionable material, <https://vimeo.com/50360220> does not.

letters are a non-conscious message that Jews have blood on their hands for the murder of Jesus, and also act as a prime to reinforce the anti-Semitic and anti-Christian subtle messages in that scene that take place concurrently or shortly after (such as the open bag of money lying next to the dead Jew, the bag was closed when removed).

- 64.** There is a non-conscious anti-Semitic, anti-Christian message that Jews are filthy and need to be cleansed. This is manifest by the image of the dead Jew Rose being dragged through the water in the painting. See Exhibit 43.
- 65.** The aforementioned non-conscious cleansing also is intended to act as a prime, so that the viewer will interpret the Gentile female that the Jews threatened, as a victim of the filthy evil Jews. The female, Irene, is to the right of the dead Jew being cleansed.
- 66.** The other Jew, Izzy/Nino is also murdered by being immersed/dunked in water. Exhibit 44.
- 67.** Exhibit 45 contains four anti-Semitic components: (1) There is a sign on the door that says "Push," but there is another blue text next to it that also reads "Push." I believe that this non-conscious message, manifest by the double push, appears to be intended to convey the anti-Semitic stereotype that Jews are pushy, and may also be intended to act as a prime for the same message in the context of the concurrent scene where the Jew Nino/Izzy is "hitting" on the reddish blonde woman next to him; (2) There is a crucifix that frames *Driver*, wearing a "skinhead" mask, conveying both a message and a prime. The message and prime is that Christianity promotes the *justified* murder of Jews; (3) There is a halo/glow on the skinhead stalking *Driver*⁵, again the message and prime is that Christianity promotes the *justified* murder of Jews because the murderer is "holy." (4) Behind the head of the skinhead are the letters "ROSS," with the "R" partially cut off. The subtle implication is that this is part of a word, namely "CROSS." The partial-word effect is even more pronounced in Exhibit 35.
- 68.** Exhibits 46-48 show an empty charity box. This is either a subtle or non-conscious prime that Jews are cheap. Whether or not it is subtle or non-

⁵ This is easier to discern when viewing the film.

conscious would depend on whether the viewer is expecting an empty charity box.

69. Virtually every anti-Semitic stereotype I am aware of is subtly manifest in *Drive*. This includes the general stereotypes that the Jews are evil, lustful, money hungry, corrupting, that they hide their identity when among non-Jews, pimp out the Christian young women, don't fight back, are a threat to the wife and child, abuse the Arabs, etc., including that Jews are enemies of Christianity.
70. Exhibits 49, 50 shows the Palestinian actor Oscar Isaacs, playing the role of the Hispanic *Standard* *Gabriel*⁶. This choice of a Palestinian actor, appears to be a subtle message regarding alleged Jewish/Israeli abuse of the Palestinians.
71. Exhibit 22 shows the film's Irene, played by the blonde haired, blue eyed actress Kate Mulligan, playing the *book's* dark haired Hispanic *Irena*. This choice of a Nordic actor, appears to be a subtle message and prime regarding the alleged historical threat the Jew is to the Aryan/Nordic race, as manifest in *Jud Suss*, and *The Eternal Jew*.
72. Exhibit 51 shows a decorative design that is similar to a Monstrance, a Roman Catholic Icon that represents the body of Jesus. Although this design may or may not have already been part of the Chinese Restaurant décor, it seems to have been intentionally placed in the scene because of its resemblance to a Monstrance and because of the anti-Christian effect it would have on viewers that have been exposed to a Monstrance. This effect could very well occur from the design alone but probably is amplified by the fact that *Driver*, throughout the film, has been imbued by Halos and Crosses, "holy" lighting effects, having a "savior" of the wife and child, and so forth. There is also a glass of red wine on the table, associated with the blood of Jesus in Christian rituals.
73. While there are very many instances in which the back-lighting creates a halo effect for the Christian characters, there is not a single instance in which the same back-lighting effect is used on a Jewish character. This suggests that many halo effects were probably intentional.

⁶ In the book *Standard's* last name was Guzman. Of course Gabriel is a prophet in Jewish, Islamic, and Christian religious texts.

74. Exhibit 52.1 shows the Jew filthy and degraded, who does not fight back but rather runs away -- a subtle anti-Semitic stereotype. This was not in the book *Drive*.
75. The average viewer would not consciously realize that *Drive* was anti-Semitic, because the anti-Semitism was subtle, and non-conscious. A viewer might however, consciously understand or recognize the subtle anti-Semitism in *Drive*, if that viewer had seen and understood the anti-Semitic messages of *Jud Suss* and another Nazi anti-Semitic film, *The Eternal Jew*, or was otherwise versed in classic anti-Semitism and Jewish rituals. Extreme neo-Nazis would also be more likely to recognize the subtle anti-Semitism for the same reasons.
76. When opining on intent, throughout this Affidavit, I have taken into consideration factors including but not limited to the following: (1) The screen play for *Drive*, written by the Iranian Hossein Amini, deviated from the short story *Drive* and an interim version of the screenplay, in a progressively more anti-Semitic way, which indicates an anti-Semitic intent. There was no anti-Semitism in the original (i.e., short story) version; if anything, it was philo-Semitic; (2) The pervasive subtle anti-Semitism in *Drive* appears to be supported and enhanced by the non-conscious anti-Semitic messages; (3) The Director has demonstrated in the YSL advertisement *Manifesto*, that he is skilled in embedding non-conscious messages in a scene; (4) The anti-Semitic and anti-Christian non-conscious messages in *Drive*, are too numerous and many appear to be artificially inserted to be co-incidental or ambiguous; (5) The director has stated he is a “fetish director”⁷, meaning that the scene is very carefully constructed including seemingly unimportant items or aspects in the scene; (6) The director admitted, when answering the allegations about the anti-Semitic content that “I didn’t put in *that* much subtext, or maybe I did unconsciously”⁸.
77. To cite a few examples where the book deviates from the screenplay: (1) There was a good Jew in the book, Herb Danzig who taught Driver to drive. This was eliminated from the movie. In the book, Driver defends Danzig and fights the

⁷ See <http://moviecitynews.com/2011/12/dp30-Drive-director-nicolas-winding-refn/> 27:00-30:00

⁸ <http://moviecitynews.com/2011/12/dp30-Drive-director-nicolas-winding-refn/> 27:00-30:00.

school bully after being taunted for having a Jewish friend. This also was eliminated in the movie. In the book, Rose is kind to people and tries to kill Driver after Driver tried to murder someone associated with Rose. In the film, Rose is a money hungry rude pushy “Kike.” In the book, Nino appears to be Sicilian. In the film, Nino is an evil Jew pretending to be Italian. In the book Rose saves a woman. In the film Rose threatens a woman. These inversions, where a positive aspect of a Jew in the book is turned into something negative, is applied to every positive aspect of the Jews throughout the book, to create the screenplay.

- 78. The subtle and non-conscious anti-Semitism manifested in *Drive* is not necessarily less effective than an overtly anti-Semitic film, for several reasons, including the fact that an overt message can be rejected, whereas a non-conscious message cannot be.**
- 79. The motion picture *Drive* uses scientific principles of psychology to exploit and deceive the viewer in order to promote an anti-Semitic and anti-Christian message without the viewer’s awareness, resulting in the viewer watching and paying for a film that promotes an ideology that is anathema to many of the viewers, or something many viewers would chose not to watch if the film’s agenda were known. The deceptive and exploitative methods used also allow for the mass distribution of such hateful messages that would otherwise not be possible if the message were overt.**
- 80. *Drive* may have been the first film to employ the above described techniques, but there is another example of such techniques to promote a deceptive, non-conscious anti-Semitic and anti-Christian message – Nike’s advertisement *The Last Game*.**
- 81. *The Last Game* uses similar methods to implement non-conscious anti-Semitic and anti-Christian messages combined with subtle anti-Semitic and anti-Christian messages, and was seen throughout the world during the 2014 World Cup, and by over 88 million on one YouTube site.**
- 82. The subtle and non-conscious anti-Semitic and anti-Christian messages combined, also promote the message that the Holy Christian must defeat the Evil Jew for the sake of the world.**

83. In the advertisement, there is an evil group that wears a logo similar to a Star of David that is taking over the world. These evil players have to play another team that appears to receive its Nike gear by climbing a stairway to a room that is glowing, and then immediately appear with their new gear looking down from the base of the *Christ The Redeemer* statue.
84. Exhibits 52-69 depict non-conscious messages that promote anti-Semitism in and of themselves and by acting as primes to support the message that the Holy Christian must defeat the Evil Jew for the sake of the world.
85. Exhibits 52-69 include added captions explaining aspects of the frames from the advertisement.
86. Exhibits 70-73 appear to be a hook nosed figure, typical of Nazi anti-Semitic propaganda images. This image and the text “Devil”, is a non-conscious message that Jews are Devils and it also acts as a prime so that the mind interprets the Star on the “Bad guys” as a Jewish star. This opinion is based in part, on the well known and documented anti-Semitism among soccer fans world-wide⁹.
87. Exhibits 74- 85 depict non-conscious messages that promote anti-Christianity in and of themselves¹⁰, and by acting as primes to support the message that the Holy Christian must defeat the evil Jew for the sake of the world. This is very similar to the Nike commercial *Good v Evil*, where the “Good Nike guys” play against the Devil and his Minions, see paragraph 8 above. In *The Last Game* the Devil and his Minions is replaced by the evil Jews.
88. Exhibit 83 again appears to represent a monstrosity, a Roman Catholic Icon representing the body of Jesus, and acts as a prime to associate the good guys with Christ, and the bad guys with the Jews, similar to *Drive*. This seems clear in context.

⁹ See for example http://www.nytimes.com/2015/04/19/opinion/sunday/anti-semitism-in-the-soccer-stands.html?_r=0 , <http://edition.cnn.com/2012/11/27/sport/football/tottenham-west-ham-jewish-football/> , <http://www.ynetnews.com/articles/0,7340,L-4477738,00.html> .

¹⁰ For example, the numerous players and images in the crucified position are consistent with the use of Christian themes and icons to justify hatred and its attendant criminal violence against Jews.

- 89.** Exhibit 74 is a subliminal/non-conscious image of Jesus, sending a non-conscious message, in context, that this is a battle between Jesus and "something else." While the Jesus statue is displayed within the normal perception threshold, its effect is, for all practical purposes subliminal, or at least inattentional, since it is presented very briefly and outside the context of the main "plot" and action.
- 90.** At 1:40 of the Nike ad, the scene is of a youngster practicing soccer alone at night in a large play yard. On a wall in the background is a crucifix-posed man whose head is a skull similar to the logo of the Risk Nothing film company that made the ad (and with "Risk Nothing" displayed prominently on a billboard in the background). On the shoulder of this crucifix-posed figure is a shadow-silhouette of the devil, horns and all. There is nothing in the scene that would explain the source of this shadow. This probably was inserted to imply that the devil (e.g., evil Jew in the context of this ad) is a force to be reckoned with by the innocent Christians.
- 91.** Nike's logo and slogan are non-consciously promoted in virtually every frame. One of the many examples is Exhibit 86, where *Nike* is spelled out in green.
- 92.** I know of no research that tests for the possibility of behavioral or attitudinal changes because of exposure to inattentional stimuli or messages, per se. Most scholarly work on inattentional perception explores physical variations in the distraction stimuli or inattentional stimuli. Inattentional perception, however, is considered by psychologists to be a type of subliminal message, and there has been a great deal of work testing for the possibility of behavioral or attitudinal changes because of exposure to subliminal stimuli and messages. Results vary. But there are many studies that support the hypothesis that subliminal messages can indeed have precisely the kinds of effects as those discussed above. For example, his scholarly work, *Preconscious Processing*, Norman Dixon cites 748 references to studies on the effects of subliminal communication, with over 80% showing positive results¹¹. As for a specific study, Velthkamp, et al. have shown

¹¹ Dixon, N. *Preconscious Processing*. New York: Wiley & Sons. 1982.

subliminal persuasion to be effective in changing behavior, especially for those predisposed toward the subliminal stimulus¹².

- 93.** Many of my opinions herein are empirical questions. That is to say, it is possible to conduct social-scientific research to test the hypothesis (or opinion) that the inattentional and subliminal stimuli in *Drive* (and in the Nike ad) discussed above do indeed have the effects predicted above on individuals already predisposed toward anti-Semitism. And it is possible to run the same test for subjects more neutral toward Jews. In fact, as a social scientist, I seriously considered running just such an experiment. I am confident, however, that such a study would not be allowed by the Human Subjects Committee, i.e., Institutional Review Board (IRB) of my institution (University of California at Davis). I sat on that IRB for over 30 years, and Chaired it for several years. I am confident that the IRB would consider it unethical to expose subjects (usually college sophomores) to the stimuli discussed above because of the chance that such exposure would trigger or exacerbate biases toward Jews. It is my opinion that the use of those symbols is unethical for the same reason in *Drive* and in the Nike ad.
- 94.** I disagree with Judge O'Brien's Circuit Court Transcript (Exhibit 10). He acknowledges that *Drive* is anti-Semitic and that the anti-Semitic messages are delivered subliminally. But he then appears to dismiss this by opining that it is acceptable for a film's trailer to say that the film is about X when in fact it is not only about X but also about Y. Judge O'Brien implies a two-for-the-price-of-one bargain of some sort. While I agree that if a film's trailer were, say, to imply a murder mystery and the film also contains romance, then there is perhaps no serious harm done; indeed that might have even been expected by some viewers of the trailer (although there would be some disgruntled viewers probably). But the "additional Y" in this film is something that many people simply would not willingly sign on for -- namely, a barrage of anti-Semitic messages presented in a sneaky way so as to not be noticed overtly (and therefore not be complained

¹² Veltcamp, Martijn; Custers, Ruud, AArts, Henk (2011), "Motivating Consumer Behavior by Subliminal Conditioning in the Absence of Basic Needs: Striking Even While the Iron is Cold." *Journal of Consumer Psychology*, 21; 49-56.

about), but nevertheless having the potential to persuade viewers to a point of view that many would find offensive. The "Y" in this case is not a two-for-the-price-of-one bargain, but rather a component of the film that would cause many, many viewers to forgo seeing it if they knew that component were present.

95. Judge O'Brien's Circuit Court Transcript (Exhibit 10) acknowledges as material fact that *Drive* contains both overt and subliminal anti-Semitic content. He also concedes that the trailer does not. He then says there is no substantive difference between the film and the trailer. But to say that the anti-Semitic content of the film does not distinguish the film from the neutral trailer is to say that the anti-Semitic content does not matter. He may or may not hold a psychological anti-Semitic bias; indeed, to say that the anti-Semitic content is material and then to say (implicitly) that it doesn't matter, is contradictory. Nevertheless, to say that there is no substantive difference between the biased film and the neutral trailer, i.e., that the anti-Semitic content doesn't matter, is itself anti-Semitic.
96. The significance, if any, of the soundtrack and music will be set forth in a separate affidavit in *Drive* if necessary
97. Additional non-conscious and subtle relevant messages, as discovered will be set forth in a separate affidavit.
98. Additional discovery will shed further light on the issue of intent as stated herein.
99. **In my opinion, all of these hateful messages in the Nike advertisement are intentional and exploit the well documented pre-existing hatred of Jews among soccer fans in order to sell more Nike gear.**
100. **These aforementioned stealthy methods of promoting hate "under the radar," without conscious awareness, can be adapted to promote hate against any group, such as Muslims, Blacks, Republicans, Democrats, etc.**
101. Based on a February 14th, 2017 peer reviewed scientific paper by a leading neurobiologist, Joseph E. LeDoux, <http://www.pnas.org/content/early/2017/02/14/1619316114>, combined with a peer reviewed 2010 publication <http://www.nature.com/nrn/journal/v11/n10/full/nrn2889.html>, there is now a scientific basis to believe that the nonconscious Star of David, and the


nonconscious cross, in the scene where the Jew Bernie Rose murders Shannon (Exhibits 11-1 through Exhibits 12-2, and Exhibits 17 and 18), results in anti-Jewish emotional feelings that affects behavior and beliefs, like any other conscious information, for reasons independent of, yet in conjunction with priming.

102. This is because the above two scientific papers *combined* establish that *emotional stimuli*, not consciously perceived because the viewer is focused on something else (inattentional blindness), although processed by sub-cortical cells, eventually becomes an “emotional feeling” coalescing with the part of the brain – the frontal cortex, where all of the other *conscious* non-emotional information is stored.
103. The above referenced scientific papers, support, in the case of *Drive* for example, that the nonconscious Star of David, and the nonconscious cross, for at least those for which it is an emotional symbol, combined with the above-referenced murder, are ultimately stored in the brain, with other conscious information, as a negative emotional feeling regarding Jews, which affects behavior and beliefs and this effect is **not** necessarily relatively weak or relatively short term, as previous studies regarding nonconscious stimuli have suggested.
104. These papers also support the hypothesis that other emotional nonconscious symbols in *Drive* and the *Last Game*, act in the same manner as the above murder scene, resulting in negative emotional feelings regarding Jews and Judaism, or positive emotional feelings about the murder of Jews. For example, the *nonconscious halo* (Exhibit 35-2 and Exhibit 35) as the Jew “Nino” is about to be murdered appears to create a positive emotional feeling about the murder of the Jew, for those for whom a halo is a positive emotional stimulus. Similarly, the nonconscious religious symbols including the “JC” in the scene where the Jew Rose tries to murder Driver, but is killed in the process, (Exhibit 8, 9, 36-3) also appears to create a positive emotional feeling regarding the murder of the Jew. The nonconscious Jewish stars (Exhibits 55-66) , the nonconscious hooked nose “devil”, (Exhibits 70-73), and the nonconscious “Christ The Redeemer” (Exhibit 74), also potentially have a negative effect on behavior and beliefs towards Jews and Judaism.

105. The extent of this effect would require additional testing, subject to the same ethical constraints discussed in paragraph 93 above.

106. There is another recent peer reviewed very recent scientific study that confirms the effect nonconscious stimuli have on behavior and beliefs, attached as Exhibit 0A. In this study nonconscious images that induced fear when consciously perceived, were processed by the brain and had a significant effect on such fears. The abstract of this study can be found at <https://www.ncbi.nlm.nih.gov/pubmed/28165171> retrieved on April 13, 2017.

FURTHER AFFIANT SAYETH NOT.



MICHAEL T. MOTLEY, Ph.D.

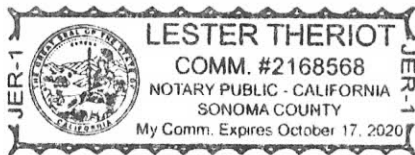
Notary Certificate Attached

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Sonoma

Subscribed and sworn to (or affirmed) before me on this 13
day of April, 2017, by Michael T. Motley

proved to me on the basis of satisfactory evidence to be the
person~~(s)~~ who appeared before me.



(Seal)

Signature Lester Theriot

EXHIBIT 0A

“SPIDER” PEER REVIEWED STUDY

Less is More: Neural Activity During Very Brief and Clearly Visible Exposure to Phobic Stimuli

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Abstract: Research on automatic processes in fear has emphasized the provocation of fear responses rather than their attenuation. We have previously shown that the repeated presentation of feared images without conscious awareness via backward masking reduces avoidance of a live tarantula in spider-phobic participants. Herein we investigated the neural basis for these adaptive effects of masked exposure. 21 spider-phobic and 21 control participants, identified by a psychiatric interview, fear questionnaire, and approaching a live tarantula, viewed stimuli in each of three conditions: (1) very brief exposure (VBE) to masked images of spiders, severely limited awareness; (2) clearly visible exposure (CVE) to spiders, full awareness; and (3) masked images of flowers (control), severely limited awareness. Only VBE to masked spiders generated neural activity more strongly in phobic than in control participants, within subcortical fear, attention, higher-order language, and vision systems. Moreover, VBE activated regions that support fear processing in phobic participants without causing them to experience fear consciously. Counter-intuitively, CVE to the same spiders generated stronger neural activity in control rather than phobic participants within these and other systems. CVE deactivated regions supporting fear regulation and caused phobic participants to experience fear. CVE-induced activations also correlated with measures of explicit fear ratings, whereas VBE-induced activations correlated with measures of implicit fear (color-naming interference of spider words). These multiple dissociations between the effects of VBE and CVE to spiders suggest that limiting awareness of exposure to phobic stimuli through visual masking paradoxically facilitates their processing, while simultaneously minimizing the experience of fear. *Hum Brain Mapp* 00:000–000, 2017. © 2017 Wiley Periodicals, Inc.

Key words: fear; masking; automatic processing; exposure; phobia

Additional Supporting Information may be found in the online version of this article.

Contract grant sponsor: R21 Research Grant from the National Institute of Mental Health to Dr. Paul Siegel; Contract grant number: 7R21MH101564-02.

The authors declare that they have no conflict of interests.

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Received for publication 4 August 2016; Revised 18 January 2017; Accepted 19 January 2017.

DOI: 10.1002/hbm.23533

Published online 00 Month 2017 in Wiley Online Library (wileyonlinelibrary.com).

INTRODUCTION

The visual masking of phobic and fear-relevant stimuli is frequently used to investigate the automaticity of fear responses. Phobic stimuli are those that are feared by a particular group of persons. Fear-relevant stimuli are those that posed threats in our evolutionary history, and thus biologically prepare us to fear them. Numerous human imaging studies have shown that masked phobic and fear-relevant stimuli activate the amygdala even though participants are not aware they are viewing these stimuli, suggesting that fear processing is automatic [Carlsson et al., 2004; Etkin et al., 2004; Larson et al., 2006; Lipka et al., 2011; Morris et al., 1998, 1999; Whalen et al., 1998, 2004; Williams et al., 2006]. Consistent with this interpretation, autonomic fear responses have been elicited by, and conditioned to, masked phobic and fear-relevant stimuli, respectively [Balderston and Helstetter, 2010; Esteves et al., 1994; Katkin et al., 2001; Öhman and Soares, 1993, 1994, 1998]. This body of masking research has focused almost exclusively on the provocation and acquisition of phobic responses.

Other studies, however, have subsequently shown that visual masking can also be used to reduce fear. Our group has shown that the repeated presentation of masked phobic images—what we term *very brief exposure* (VBE)—reduces avoidance and self-reported fear of a live tarantula in spider-phobic persons [Siegel et al., 2011; Siegel and Gallagher, 2015; Siegel and Weinberger, 2009, 2012, 2013a; Weinberger et al., 2011]. These adaptive effects endure as long as one year [Siegel and Warren, 2013b]. Whereas visible exposure to spider images induces sympathetic arousal and subjective distress in phobic participants and does not affect their avoidance of the tarantula, VBE to the same masked images reduces phobic avoidance and induces neither arousal nor distress, suggesting that its therapeutic effects occur automatically. The purpose of masking in VBE is not to eliminate awareness of phobic stimuli—to render them “unconscious,” which is very difficult when continuously presenting masked phobic, color images—but to severely limit subjective awareness of them. A meta-analysis of 250+ phobic participants found that the therapeutic effects of VBE occur when these participants lack subjective awareness of the masked stimuli, and thus do not experience distress [Warren and Siegel, in preparation]. Challenging the clinical conviction that only direct confrontation of phobic situations reduces fear, these reproducible effects of masked exposure to phobic stimuli on fear-related behaviors suggests the presence of adaptive neural processes that reduce, rather than engender, fear responses.

The purpose of this study was to investigate the neural basis for the adaptive effects of VBE—masked exposure to phobic images. Thus, the design of this study was based on the aforementioned behavioral studies that manipulated the duration of stimulus presentation in comparing the effects of VBE and clearly visible exposure to the same phobic images. We presented each of three conditions to

participants diagnosed with Specific Phobia of spiders and healthy, non-phobic participants: (1) masked exposure to images of spiders (VBE); (2) clearly visible exposure (CVE) to spiders; and (3) masked images of flowers (control). By contrasting the effects of VBE and CVE to phobic stimuli, we assessed how limiting the conscious recognition of exposure influences brain activity. VBE is pure exposure: participants are instructed to focus intently on repeated trains of masked phobic stimuli, rather than give trial-wise responses to those stimuli. To maintain consistency with behavioral studies attesting to the adaptive effects of VBE, our study participants were similarly instructed. Participants provided on-line fear ratings after each train of stimuli. We assessed correlations between neural activity and these fear ratings, as well as other phobic behaviors taken prior to the experiment.

Consistent with prior imaging studies of Specific Phobia [Del Casale et al., 2012; Linares et al., 2012], we expected both masked and visible exposure to spiders—VBE and CVE—to activate regions supporting subcortical fear (e.g., amygdala) and visual systems more strongly in phobic than in control participants. Because VBE involves focusing intently on repeated trains of masked phobic stimuli, we expected it to activate regions supporting attention (e.g., dorsolateral prefrontal cortex) in phobic versus control participants. Based on our prior findings that VBE automatically reduces phobic participants’ fear of a live tarantula, we expected VBE to activate ventral prefrontal cortical (vPFC) regions—which are believed to support automatic fear inhibition [Delgado et al., 2008]—in phobic participants, although such activation should not necessarily differ from activation in healthy controls, who naturally inhibit fear responses. Based on our prior findings that CVE induces sympathetic arousal and subjective distress in phobic participants, we expected CVE to deactivate vPFC regions in the phobic group. Thus, in direct contrasts of CVE and VBE to spiders in the phobic group, we expected VBE to generate stronger activation of vPFC and DLPFC regions than CVE. Correspondingly, CVE would cause phobic participants to experience fear, whereas VBE would not. Confirmation of these hypotheses would challenge prevailing theory by showing that limiting conscious recognition of phobic stimuli paradoxically facilitates the activation of fear processing and regulation systems in the brain, suggesting the presence of neural pathways for reducing fear other than those identified through conscious, cognitive processing [Delgado et al., 2008; Hermann et al., 2009].

METHODS AND MATERIALS

Participants

We studied 21 spider-phobic and 21 healthy control participants, all right-handed, female undergraduate students. Women were chosen because previous studies have shown that 75%–80% of all specific phobics are women [Fyer,

1998; Magee et al., 1996]. Potential participants were administered the *Structured Clinical Interview for DSM-IV* [First et al., 1997], the *Fear of Spiders Questionnaire* [FSQ; Szymanski and O'Donohue, 1995], and a *Behavioral Avoidance Test* in which they were asked to gradually approach a live tarantula [described below; Siegel and Weinberger, 2012]. Phobic participants met DSM-V criteria for Specific Phobia, did not meet criteria for any other current or lifetime disorder, were in the top 15% of the distribution of FSQ scores, exhibited impairing fear of the tarantula, and showed color-naming interference of spider words on a *Spider Stroop Task*, an implicit measure of spider fear [Williams et al., 1996]. Non-phobic participants did not meet criteria for any disorder, were in the bottom 30% of the distribution of FSQ scores, and displayed no avoidance and reported no fear of the tarantula. Average age was 19.7 years (SD = 1.6; Range: 18–25). Participants provided written informed consent.

fMRI Task Design and Stimuli

Two features of the study design built on prior imaging studies of masked stimuli by controlling for visual features of the phobic and fear-irrelevant (control) stimuli, and thus their effects on neural activity. Prior imaging studies of Specific Phobia have tended to use as control stimuli various fear-irrelevant images having visual configurations that differed significantly from those of the phobic stimuli [e.g., snakes vs. birds, spiders vs. mushrooms; Alpers et al., 2009; Leuken et al., 2011; Schweckendiek et al., 2011]. As shown in Figure 1, we used fear-irrelevant stimuli (flowers) that had a similar visual configuration as the phobic stimuli (spiders), and matched these stimuli for lower-order visual features. Thus, effects on neural activity of masked phobic versus fear-irrelevant stimuli were determined to the greatest extent possible by their emotional properties.

Second, before contrasting neural activity between groups and conditions, within each group and condition we first contrasted neural activity induced by the target stimuli with activity induced by corresponding neutral stimuli composed of scrambled fragments of the target stimuli—and thus many of the same lower-order visual features. Thus, each condition generated patterns of neural activity determined by the identity and emotional meaning of the target stimuli to the participants.

fMRI task design

Each of three conditions was presented during fMRI scanning: (1) very brief exposure (VBE) to masked spiders (masked, 33.4-ms stimulus duration); (2) clearly visible exposure (CVE) to spiders (unmasked, 117-ms duration); and (3) very brief flowers (VBF; control; masked, 33.4-ms duration). These conditions were manipulated within-subjects in order to compare their effects directly within the same participants. Thus, we acquired three runs, one

for each condition. The six possible sequences of conditions (e.g., VBE → CVE → VBF) was counterbalanced across participants. The conditions were separated by two minutes of rest. Each condition consisted of 16 blocks of 10 target stimulus-mask trials alternating with 16 blocks of 10 neutral stimulus-mask trials, yielding a 10-minute run of 16 paired blocks for each target stimulus type. In each condition, blocks of target stimuli (spiders or flowers) were alternated with blocks of masked neutral stimuli in order to contrast neural activity induced by the target stimuli with activity induced by masked neutral stimuli. Each neutral stimulus consisted of scrambled pieces of the corresponding target stimulus. Alternating individual trials of target and neutral stimuli would have departed from the crucial feature of VBE—repeated presentation of masked phobic stimuli, and would have precluded on-line fear ratings, which were overriding considerations in study design.

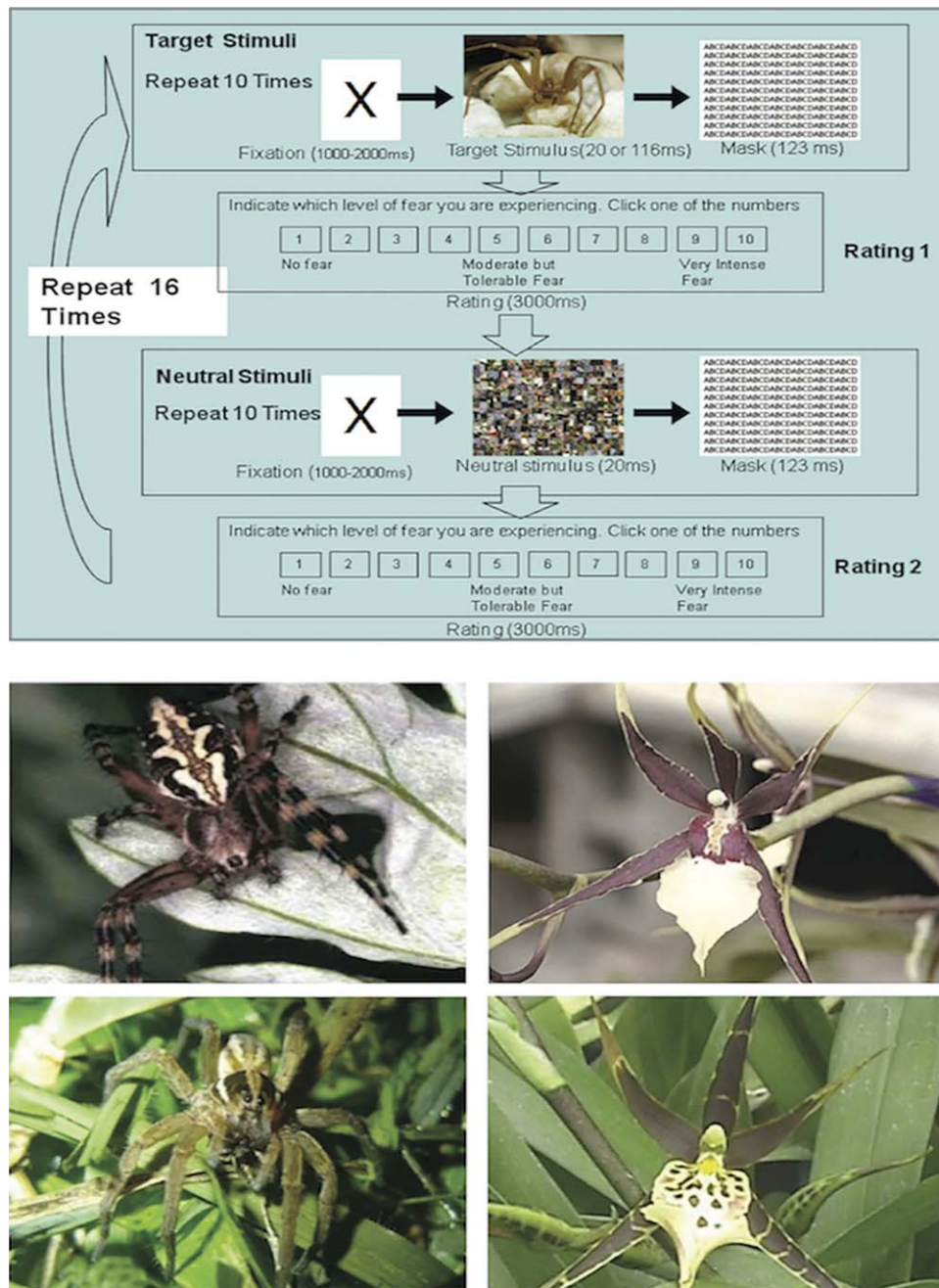
Each target or neutral trial consisted of an “X” for gaze fixation (duration jittered from 1 to 2 sec), followed immediately by a target stimulus (spider or flower, depending on condition) or corresponding neutral stimulus, followed immediately by the masking stimulus (117 ms, array of the repeated letters “ABCD”). Each trial (“X”/target or neutral stimulus/mask) was repeated 10 times to yield a block of 10 target or neutral trials in succession. There was no inter-trial interval. After each block of 10 target or neutral trials, participants rated levels of fear on a 10-point, anchored ordinal scale (3,000 ms).

Before entering the scanner, and immediately before the start of each run, participants were told that they would be presented with a series of stimuli that they may or may not recognize. Their task was to maintain their focus on the stimuli, and to provide fear ratings on the scale that would appear after each block of stimuli (~every 12 sec).

Stimuli and presentation

The *target stimuli* were 25 images each of spiders or flowers, 400 × 300 pixels (72 dpi). The bottom panel of Figure 1 shows representative spider and flower images. To isolate the emotional effects of masked phobic stimuli on neural activity, we masked fear-irrelevant stimuli (flowers) with a visual configuration (central body with multiple radiations) that was similar to that of the spiders. The flower images were either of *Cleome*, the “spider flowers,” or *Brassia Rex Sakata*, the “spider orchids”—possessing a central body (ovary/style) with multiple long, thin radiations (petals), controlling for some of the edge and contour features of the spider images. The color, hue, luminance, and contrast of luminance of the flower images also matched those of the spider images.

Twenty-five corresponding *neutral stimuli* were created from the target images, which were cut into 1,200 squares of 10 × 10 pixels (Fig. 1). The squares were randomly shuffled so that the features of the target images were not discernible in the neutral stimuli. The neutral stimuli thus

**Figure 1.**

The top panel shows the fMRI task design. Each of the three 10-minute conditions consisted of 16 alternating blocks of 10 target stimulus-mask and 10 neutral stimulus-mask trials. Each trial was an X (fixation point), then either a target or a neutral stimulus (33.4-ms or 117-ms) depending on block, followed by the masking stimulus (117-ms). The duration of the X was jittered from 1,000 to 2,000-ms to prevent expectancies about the appearance of the target stimuli, with no inter-trial interval. After each block of 10 target or neutral trials, a 10-point, anchored, ordinal scale appeared for

subjects to rate levels of fear. Thus, a block of 10 target stimuli is presented, followed by the VAS, then a block of 10 neutral stimuli, followed by another VAS. This process was repeated 16 times in each condition. The bottom panel shows examples of the spider and flower images, 400 × 300 pixels, matched for color, hue, luminance and contrast of luminance. The flower images were either of *Cleome*, the “spider flowers,” or *Brassia Rex Sakata*, the “spider orchids”—possessing a central body (ovary/style) with multiple long, thin radiations (petals), like the spider images.

retained the colors, luminance, hue, and general texture of the targets—that is, their lower-order visual features, but contained multiple contours and thus lacked a perceivable object.

The *masking stimulus* was an array of the letters ABCD, 463×354 pixels (400 dpi), repeated to cover entirely the area of the target images. Signal detection analyses and subjective tests of awareness have shown the mask to be effective at preventing recognition of the spider and flower images when either type of stimuli was repeatedly presented for 33-ms each or less [Siegel et al., 2011; Siegel and Weinberger, 2009, 2012; Weinberger et al., 2011].

The stimuli were presented using Eprime (Psychology Software Tools, Inc.) on a PC monitor (resolution $1,024 \times 768$, refresh rate 60 Hz), rear projected onto a 2×3 inches mirror mounted on the head coil 9 cm in front of the eyes.

Behavioral Assessments

For detailed description of these assessments, see section SM 1 of the Supporting Information. The *Fear of Spiders Questionnaire* [FSQ, Szymanski and O'Donohue, 1995] assessed the extent to which participants believed they were fearful of spiders. Filler questions, which concerned other fears and sensation seeking, disguised the intent of the FSQ. A *Behavioral Avoidance Test* (BAT) was used to measure levels of avoidance of a live tarantula housed in a 10-gallon glass aquarium. Participants were asked to complete a series of approach tasks that brought them progressively closer to the tarantula (section SM1 of the Supporting Information). A *Spider Stroop task* was used to measure color-naming interference of spider words, an implicit measure of fear [Newman and McKinney, 2002; Williams et al., 1996]. Participants first named the color of a series of neutral words (e.g., BED appears in the color red). Then they named the color of a series of spider-related words (e.g., WEB), matched for word length and number of vowels and consonants. The difference between the times to name the colors of the spider versus neutral words yielded a color-naming interference score.

A funneled stimulus interview, progressing from open-ended to specific questions, was conducted immediately after each of the three condition to assess knowledge of the stimuli. See SM1 of the Supporting Information for the list of questions that composed the interview.

Functional Image Acquisition and Preprocessing

Functional images were acquired on a GE Signa 3-Tesla scanner using an echo planar protocol. For each participant, 343 imaging volumes were collected for each of the three, 10-minute runs, including 6 initial “dummy” volumes. Twenty T1-weighted images were acquired parallel to the anterior commissure-posterior commissure line, followed by a 3-dimensional spoiled gradient recall (SPGR) image for coregistration with axial echoplanar images.

Acquisition parameters for the axial echoplanar images were: TR = 1,800 ms; TE = 28 ms; flip angle = 75° ; field of view = 22.4×22.4 cm; acquisition matrix = 64×64 ; slice thickness = 4.0 mm; gap = 0 mm; effective resolution = $3.5 \times 3.5 \times 4.0$ mm; 32 slices per volume provided whole brain coverage.

Each participant's functional images were first visually inspected for motion and other artifacts. Image preprocessing was conducted using a standard pipeline implemented in SPM8 (<http://www.fil.ion.ucl.ac.uk/spm/>) under MATLAB 2010B, including: (a) slice-timing correction based on sinc function interpolation and fast Fourier transform for temporal realignment of slices within each volume, using the middle slice as the timing reference; (b) motion correction for three translational directions and three rotations, derived from a series of rigid-body transforms of each image volume with respect to the first image volume by minimizing the mean square error between the volumes; (c) spatial normalization by reformatting each high-resolution SPGR image to the Montreal Neurological Institute template ICBM 152 ($2 \times 2 \times 2$ mm³ voxels); (d) spatial smoothing of functional images with an 6 mm FWHM Gaussian kernel, and temporal smoothing with a Discrete Cosine Transform high-pass filter (basis function length = 128 sec).

Head motion

During image preprocessing, we took several steps to ensure that motion artifacts did not confound measurement of neural activity. We used the SPM8 motion realignment procedure to detect 3 translation motion parameters and 3 rotation parameters for each fMRI run when realigning images with the first image volume. The three fMRI runs (VBE, CVE, VBF) of all participants were less than 3 mm translational motion and less than 3° rotational motion. Second, we tested whether head movement during the MRI scans differed between the phobic and control groups in each of the three conditions by calculating an aggregate head motion parameter from the six aforementioned parameters for each participant in each condition: the sum of the root mean squares of the six motion parameters for each image volume with respect to the previous image volume. The groups did not differ in head motion, as indexed by this aggregate parameter, in any of the conditions (for VBE, $P = 0.69$; CVE, $P = 0.21$; VBF, $P = 0.73$). Third, we used ArtRepair (<http://cibsr.stanford.edu/tools/human-brain-project/artrepair-software.html>) to detect and repair imaging volumes that still contained motion-induced spikes in fMRI signal. ArtRepair assesses the relative change in translational and rotational motion parameters between successive imaging volumes. When the square root of the squared sum of the difference of the motion parameters between the current and previous imaging volumes exceeds 1, the current imaging volume is replaced by the mean of the previous and next imaging volumes. The developers of ArtRepair suggest that runs containing

greater than 15% of volumes need repair are excluded from analyses. None of our runs surpassed this threshold.

Processing and Statistical Analysis of the Functional Imaging Data

Processing each participant's fMRI data

The general linear model in SPM8 was used to process each participant's fMRI data for each of the three conditions. Data were modeled for each participant and for each condition using a constant and four independent regressors corresponding to the active block (spider or flower presentation), the first fear rating immediately following the active block, the neutral block, and the second fear rating following the neutral block. The BOLD signal change for each event was generated by convolving a canonical hemodynamic response function (HRF) with a boxcar function (BCF) derived from the onsets and durations of each event. The model was estimated using the Restricted Maximum Likelihood (ReML) algorithm with autocorrelation in the time series removed using a first-order autoregressive model. Then task-related contrast images (e.g., VB spider vs. Neutral) were generated using the SPM8 contrast manager. Each participant's contrast images of target vs. neutral blocks of stimuli were intensity-normalized using the respective last beta images in the fMRI time series to standardize image intensity across runs. A conjunction mask was applied to these contrast images of target versus neutral events to ensure that only voxels without signal voids were analyzed.

Group-level processing of the fMRI data

Each participant's task-related contrast images were then entered into a group-level, Random Effects analysis to determine significant BOLD response to target versus neutral stimuli within each condition and group, separately. Bayesian posterior inference was used for the group-level analysis of the contrast images generated for each participant, specifically an in-house, MATLAB-based algorithm of Neumann and Lohmann's method (2003) for inferring the posterior probability of detecting group effects brain-wise. We selected Neumann and Lohmann's method (2003) of Bayesian analysis in order to address the recently highlighted problem of false positive findings associated with correcting *P*-values for multiple comparisons in parametric methods of statistical analysis. On the basis of a recent meta-analysis, Eklund et al. [2016] reported that parametric statistical methods that rely on spatial cluster thresholding to correct for multiple comparisons suffer from inflated false positive rates. Neumann and Lohmann [2003] compared results using their Bayesian method without any correction for multiple comparisons to the results of a conventional approach based on parametric inference (the standard second-level analysis in LIPSIA) thresholded at $Z = 3.09$. The parametric method was performed voxelwise with Bonferroni correction; it did not

employ cluster-based thresholding. Neumann and Lohmann [2003] showed that the "uncorrected" results of their Bayesian method were comparable to the results obtained using this conventional parametric method with a stringent threshold.

More significantly, Neumann and Lohmann's [2003] Bayesian method does not depend on spatial clusters, and so does not incur the problems of parametric methods that rely on them to correct for multiple comparisons. The theoretical work and numerical simulations of Friston and colleagues [Friston et al., 2002; Friston and Penny, 2003] have shown that Bayesian-inference methods do not incur multiple-comparison problems simply because *they do not have false positives*—unlike the parametric statistical methods criticized by Eklund et al. [2016]. In Bayesian-inference methods, the posterior probability estimation for a given voxel is equal for analyses involving a single voxel and analyses involving all brain voxels [Friston and Penny, 2003]. Such empirical demonstrations show that Bayesian-inference methods (including Neumann and Lohmann's method) do not require use of cluster extent thresholds in calculating their posterior probability estimates. The power and utility of Bayesian methods in controlling false positive findings is the reason why other prominent studies have used Neumann and Lohmann's implementation of Bayesian inference [see Klein et al., 2007].

Because they do not require additional adjustments of statistical thresholds in their posterior probability estimates, some may assume that Bayesian approaches to fMRI statistical analysis are "unthresholded." As an *additional* requisite for assuming statistical significance, however, we required positive findings to have a posterior probability greater than 97.5% (a more stringent threshold than that used by Klein et al. [2007] in a *Science* article), and an extent of at least eight contiguous voxels in all of our analyses (discarding results comprising few voxels, i.e., of questionable biological significance).

Our Bayesian method for group-level fMRI analysis bestowed other advantages. It allowed us to test our hypotheses directly (i.e., it produced a probability that our alternative hypotheses are correct), rather than simply reject the null hypothesis (i.e., producing a probability that it is acceptable to reject the null hypothesis based on how unlikely it is). Bayesian approaches are useful for detecting effects in groups that are heterogeneous, as can be the case with diagnostic samples, where the risk of missing detection of true biological effects (type II error) may be as important as reporting false positive findings (type I error). Finally, our Bayesian method is particularly reliable in comparing different groups of participants, minimizing the extent to which group-level effects are unduly weighted by individual differences in brain activity.

Analyses of regions of interest (ROIs)

We hypothesized that both VBE and CVE to spiders would both activate subcortical fear regions (amygdalae),

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TABLE I. Mean fear ratings of the phobic and control groups for the three conditions

Group	Type of exposure		
	Clearly visible spiders	Very brief spiders	Very brief flowers
Phobic	5.40 (.43)	3.64 (.37)	2.92 (.35)
Control	1.26 (.32)	1.07 (.26)	1.03 (.25)

Note. Values outside of the parentheses represents mean fear ratings on the 1–10 scale. Values within parentheses represent standard error of measurement.

and that VBE would activate ventral PFC regions that support emotion regulation more than CVE in phobic participants. Thus, we conducted group-level analyses of the activation time courses of the right and left amygdala, and of the ventral medial prefrontal cortex, given their well-documented involvement in fear activation and regulation, respectively [Delgado et al., 2008; Phelps et al., 2004]. Activity within these ROIs was assessed using small volume correction implemented in SPM8. A family-wise error (FWE) correction was applied to a local search region defined by a mask image for each ROI. The mask image was generated by coregistering the anatomical probability maps of ROIs from the SPM Anatomy Toolbox [Amunts et al., 2005] with the MNI template ICBM152.

RESULTS

Fear Ratings

Fear ratings for blocks of neutral stimuli were subtracted from those of corresponding blocks of target stimuli and statistically evaluated. Preliminary ANOVAs used blocks of stimuli as factors to test for effects of repeated measurement, and yielded no main or interaction effects. Thus, each participant's fear ratings were averaged within each condition (separately for target and neutral stimuli). Table I shows mean fear ratings of the phobic and control groups for each of the three conditions. In a Group (Phobic or Control) \times Exposure (3 conditions) mixed model ANOVA, the main effect of Group was highly significant, $F(1,40) = 18$, $P = 0.0001$, showing that fear ratings of the phobic group exceeded those of the control group, regardless of condition. The main effect of Exposure was also highly significant, $F(2,80) = 16.4$; $P = 0.0001$, and driven by the phobic group. In a one-way ANOVA of the phobic group, the main effect of Exposure was highly significant, $F(2,40) = 13.2$, $P = 0.0001$; $\eta^2 = 0.63$ (effect size). Post-hoc Tukey's tests of the phobic group showed that clearly visible exposure (CVE) to spiders induced significantly more fear than both VBE to spiders, $P = 0.001$, and very brief flowers (VBF), $P = 0.001$. The same comparison of VBE and VBF was not significant ($P = 0.30$).

Imaging Findings

After presenting an overview of consistent patterns of neural activity across the diagnostic groups, we present the imaging findings in the order corresponding to our hypotheses in the introduction: first group contrasts and then condition contrasts in neural activity. We then present post hoc findings to aid interpretation of our findings for hypothesis testing.

Overview

Figure 2 shows patterns of activation generated by the active conditions—CVE and VBE to spiders—relative to neutral stimuli in the diagnostic groups. See Supporting Information Figure S1 in section SM2 of the Supporting Information for patterns of activity generated by VBF, for which group differences were virtually absent. As shown in Figure 2, the exposure conditions generated a variety of patterns of neural activity across and within the groups. In order to present these patterns efficiently, and to facilitate interpretation in terms of brain-behavior correlates, we present them in terms of information processing networks rather than a prohibitively detailed, region-by-region, reporting of findings.

The exposure task generated consistent patterns of activation across the conditions and groups, including neural systems subserving (1) *vision*, bilateral occipital and inferior parietal cortices, reflecting different features of the target versus neutral stimuli; (2) *attention*, dorsolateral prefrontal cortices (DLPFC) and superior bilateral parietal cortices, reflecting the salience of the target versus neutral stimuli; (3) *affective evaluation*, cortical regions identified by neuroimaging reviews of Specific Phobia [Del Casale et al., 2012; Linares et al., 2012]: bilateral orbitofrontal cortices (OFC), anterior insula (AIns), anterior cingulate cortex (ACC), dorsal medial prefrontal cortex (DMPFC), reflecting the emotional salience of the target stimuli; and (4) *motor control*, striatum and pre-motor regions, likely reflecting inhibition of responses to stimuli within the scanner. In the phobic group, CVE to spiders marginally activated the affective evaluation and pre-motor regions, and did not activate the striatum (putamen and caudate).

Across diagnostic groups, CVE and VBE to spiders deactivated regions associated with the *Default Mode Network* (DMN; posterior cingulate cortex, precuneus, cuneus, bilateral parietal cortices, medial PFC regions, middle-superior frontal gyri). However, CVE and VBE deactivated the DMN much more strongly in the phobic group, reflecting the greater salience of spiders to these participants.

Group contrasts of the exposure conditions

Differences in activation between the phobic and control groups were strongest for CVE, intermediate for VBE (Fig. 2), and nearly absent for VBF (Supporting Information Fig. S1, Supporting Information). For locations and activation

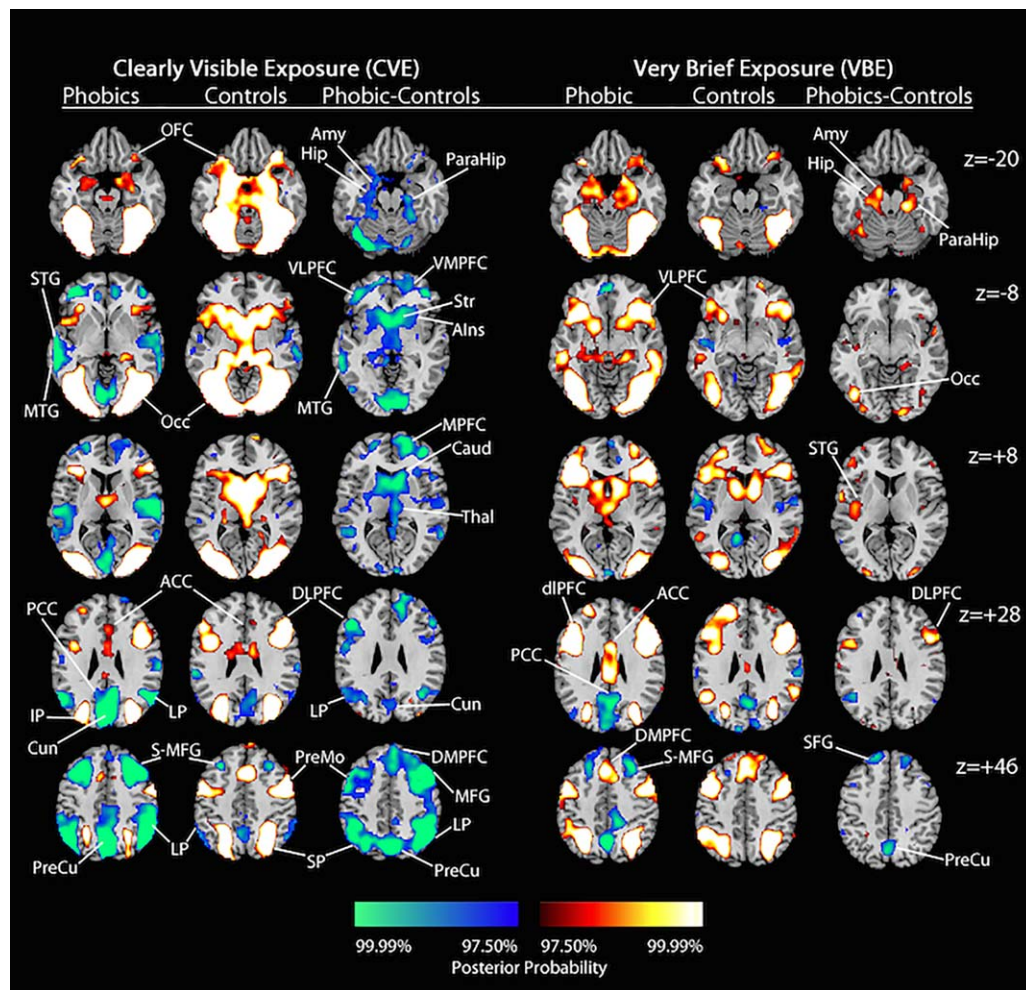


Figure 2.

Representative slices of the posterior probability maps generated by clearly visible exposure (CVE) and very brief exposure (VBE) to spiders in the phobic and control groups, and corresponding group contrasts. The color code at the bottom indicates the posterior probability of positively and negatively activated regions (from 97.5% to 99.9%). Positively activated regions—red to white color bar—indicate greater BOLD response to blocks of target than neutral stimuli; negatively activated regions—blue to green color bar—indicate greater BOLD response to blocks of neutral than target stimuli. Proceeding from left to right in each row, the region labels identify the following. $z = -20$: OFC, orbital frontal cortex; Amy, amygdala;

Hip, hippocampus; ParaHip, parahippocampal gyrus. $z = -2$: STG, superior temporal gyrus; MTG, middle temporal gyrus; Occ, occipital cortex; VLPFC, ventral lateral prefrontal cortex; VMPFC, ventral medial prefrontal cortex; Str, striatum (putamen and caudate); Alns, anterior insula. $z = +8$: MPFC, medial prefrontal cortex; Caud, caudate; Thal, thalamus. $z = +28$: PCC, posterior cingulate cortex; IP, inferior parietal cortex; Cun, cuneus; ACC, anterior cingulate cortex; LP, lateral parietal cortex; DLPFC, dorsolateral prefrontal cortex. $z = +46$: PreCu, precuneus; S-MFG, superior-middle frontal gyrus; PreMo, premotor cortex; SP, superior parietal cortex; DMPFC, dorsal medial prefrontal cortex; MFG, middle frontal gyrus; SFG, superior frontal gyrus.

levels of brain regions that were differentially activated by the exposure conditions in the phobic versus control groups, see Supporting Information Table 1 in section SM2 of the Supporting Information.

Contrary to our hypothesis that CVE to spiders would activate fear and visual regions more strongly in phobic than in control participants (see p. 4), CVE activated all of

the aforementioned task-driven systems more strongly in the control group than the phobic group, and activated a subcortical system subserving rapid *emotion* response more strongly in control than in phobic participants: thalamus, amygdala, hippocampus, parahippocampal gyri. As predicted, CVE strongly deactivated ventral prefrontal regions that prototypically support *emotion regulation* in the phobic

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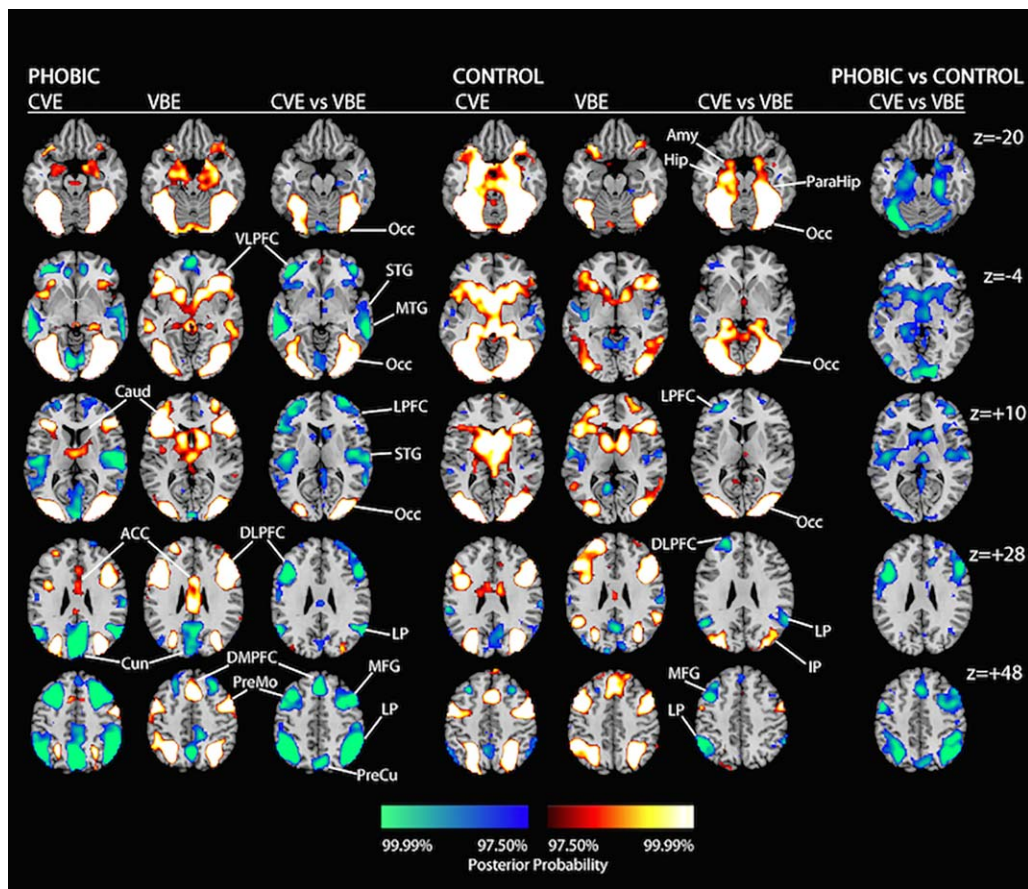


Figure 3.

Representative slices of the posterior probability maps generated by direct contrasts of the clearly visible exposure (CVE) and very brief exposure (VBE) conditions within each diagnostic group (phobic and control), and the corresponding condition contrasts. Coding of the color scales is as in Figure 2. Proceeding from left to right in each row, the labels identify the following. $z = -20$: Occ, occipital cortex; Amy, amygdala; Hip, hippocampus; ParaHip, parahippocampal gyrus. $z = -4$: VLPFC,

ventral lateral prefrontal cortex; STG, superior temporal gyrus; MTG, middle temporal gyrus. $z = +10$: Caud, caudate; LPFC, lateral prefrontal cortex; STG, superior temporal gyrus. $z = +28$: ACC, anterior cingulate cortex; DLPFC, dorsolateral prefrontal cortex. LP, lateral parietal cortex; IP, inferior parietal cortex. $z = +46$: DMPFC, dorsal medial prefrontal cortex; PreMo, premotor cortex; MFG, middle frontal gyrus; PreCu, precuneus.

group [ventral medial and ventral lateral prefrontal cortices, VMPFC and VLPFC; Hermann et al., 2009; Phelps et al. 2004]. CVE also deactivated temporal regions associated with higher-order *language* (e.g., labeling; middle and superior temporal gyri, MTG and STG) and the DMN in phobic participants.

Consistent with our hypotheses (see p. 4), *VBE to spiders* activated the aforementioned subcortical emotion system, vision and attention systems, and regions supporting higher-order language more strongly in the phobic group than in the control group. Also consistent with our hypotheses, VBE activated ventral prefrontal regions supporting emotion regulation and the cortical affective evaluation system comparably in the phobic and control groups. VBE also

deactivated DMN regions in the phobic group strongly enough to emerge in group contrasts.

Direct contrasts of the active exposure conditions: CVE versus VBE to spiders

This comparison identified the effects of limiting conscious recognition of the spider images on neural activity, while controlling for their visual and emotional properties (Fig. 3). Consistent with our hypothesis that VBE would activate ventral PFC regions more strongly than CVE in the phobic group, CVE *deactivated* and VBE *activated* regions supporting emotion regulation (VLPFC) and higher-order language (MTG, STG) in the phobic group,

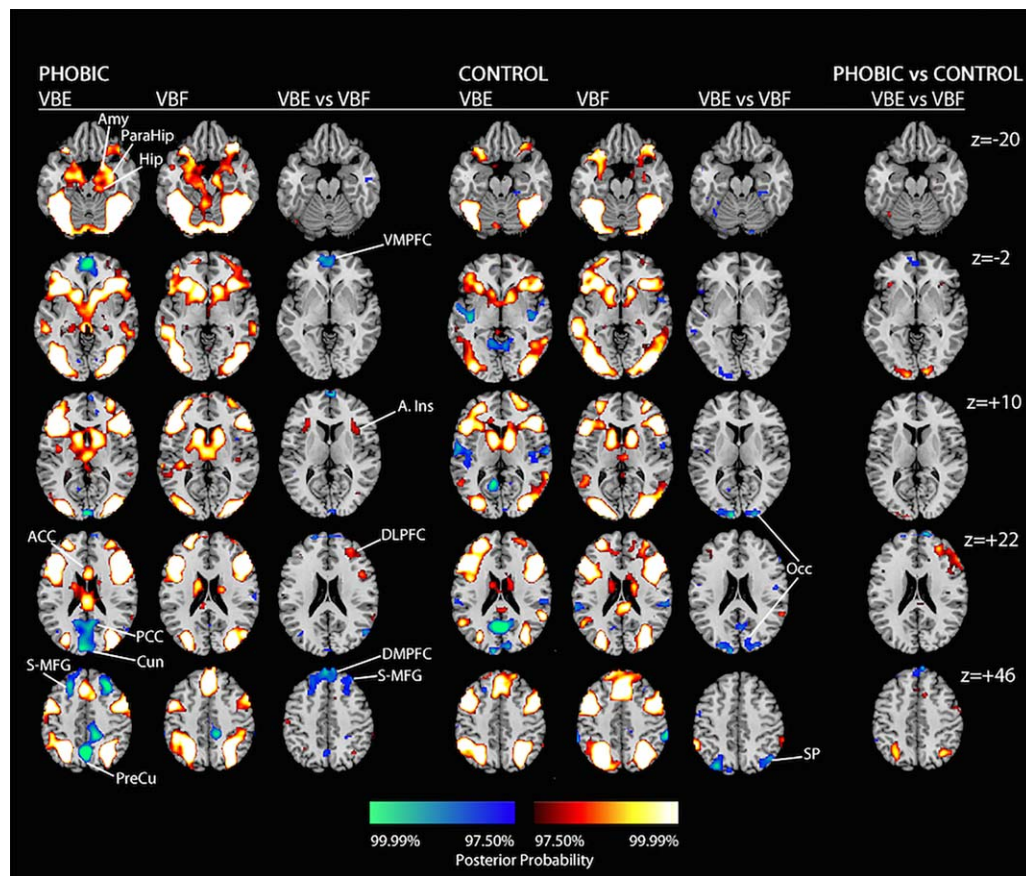


Figure 4.

Representative slices of the posterior probability maps generated by direct contrasts of the very brief exposure (VBE) to spiders and very brief flower conditions within each diagnostic group (phobic and control), and the corresponding condition contrasts. Coding of the color scales is as in Figure 2. Proceeding from left to right in each row, the labels are: $z = -20$: Amy, amygdala; Hip, hippocampus; ParaHip, parahippocampal gyrus.

effects that were absent in the control group. Consistent with our hypothesis that VBE would activate DLPFC regions more strongly than CVE in the phobic group, VBE activated the attention (LPFC/DLPFC), affective evaluation (insula, ACC, DMPFC), and motor control systems (striatum and pre-motor regions) much more strongly than CVE in the phobic group, effects that were absent or comparably marginal in the control group. Finally, CVE deactivated DMN regions more strongly than VBE in the phobic group, an effect that was absent in the control group.

In the control group, CVE to spiders activated the subcortical emotion system more strongly than VBE, an effect that was notably absent in the phobic group. As shown in the right-most column of Figure 3, all of these CVE versus VBE effects within the groups were strong enough to emerge in 3-way, group \times condition \times stimulus (target/neutral), interactions.

$z = -2$: VMPFC, ventral medial prefrontal cortex. $z = +10$: A. Ins, insula; Occ, occipital cortex. $z = +22$: ACC, anterior cingulate cortex; PCC, posterior cingulate cortex; Cun, cuneus; DLPFC, dorsolateral prefrontal cortex. $z = +46$: S-MFG, superior-middle frontal gyrus; PreCu, precuneus; DMPFC, dorsal medial prefrontal cortex; SP, superior parietal cortex.

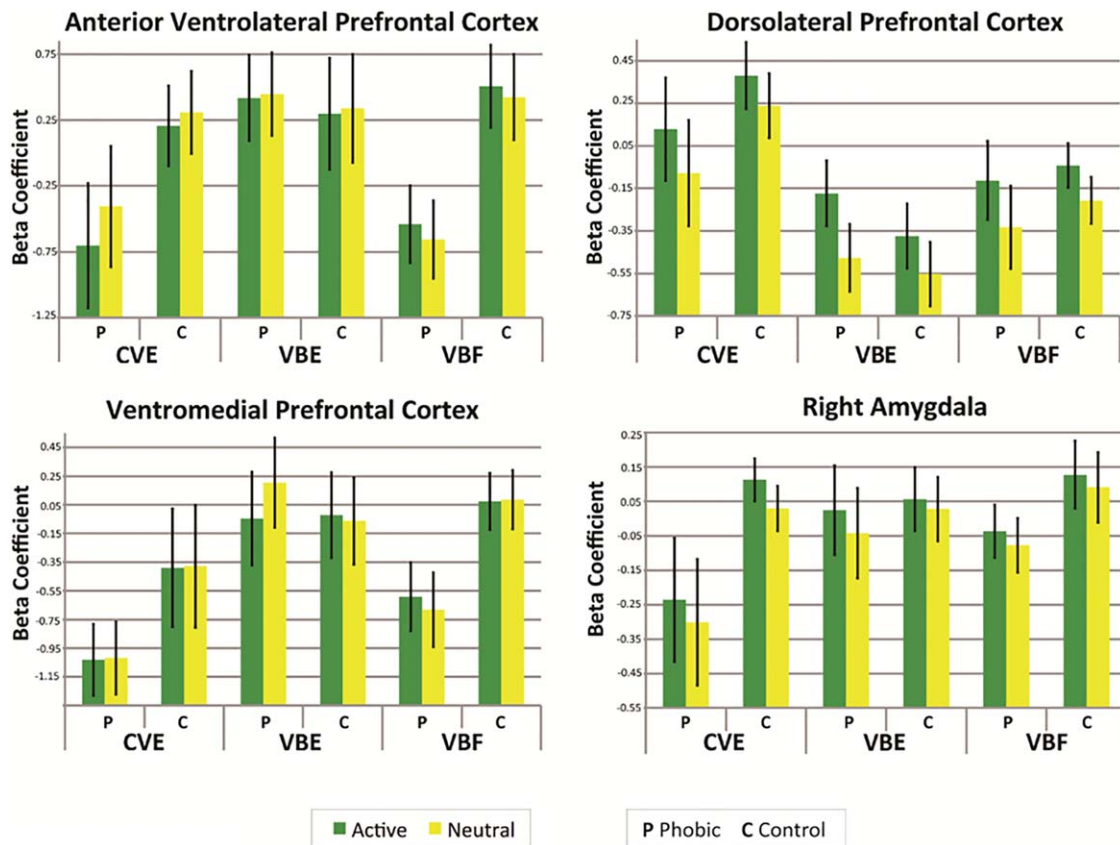
Direct contrasts of the masked conditions: VBE to spiders and very brief flowers (VBF)

This comparison controls for the effects of masking the target stimuli on neural activity, isolating the effects of exposure to masked fear-relevant (VBE) versus fear-irrelevant (VBF) stimuli (Fig. 4). In the phobic group, VBE deactivated DMN regions, and activated the anterior insula (affective evaluation) and right DLPFC regions (attention) more strongly than did VBF. In the control group, by contrast, VBF activated occipital and superior parietal regions (vision/visual attention) more than VBE.

Beta coefficients for the groups in each condition

In a subtraction paradigm, activations can be driven either by increased response to target stimuli or decreased

♦ Less is More ♦

**Figure 5.**

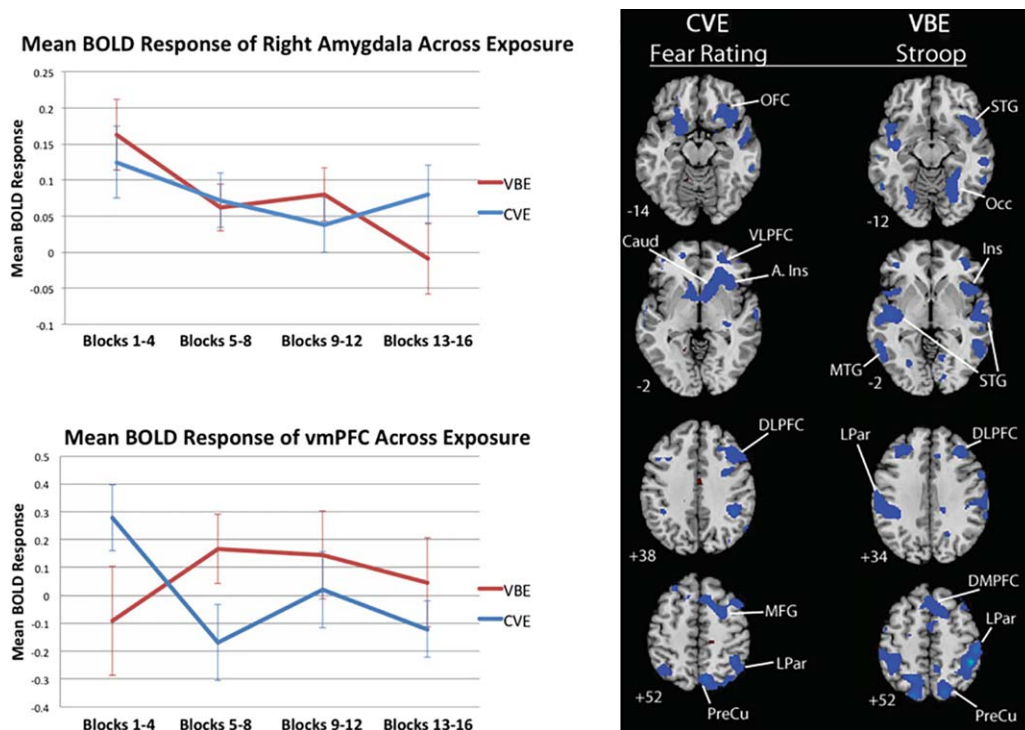
Mean beta coefficients for a representative sample of brain regions for each of the three stimulus conditions, within each diagnostic group. The green bars represent beta values for blocks of target stimuli (active task) in each condition; the yellow bars represent beta values for the blocks of neutral stimuli. CVE, clearly visible exposure to spiders; VBE, very brief exposure to spiders; VBF, very brief flowers; P, phobic group; C, control group.

response to neutral stimuli (and conversely for patterns of deactivation). To distinguish between these possibilities, we extracted beta coefficients from each participant's contrast maps for each condition. Figure 5 shows bar graphs for a representative sample of brain regions. "Active" bars refer to the target stimuli in each condition—CV spiders, VB spiders, or VB flowers; "Neutral" bars refer to the neutral stimuli. In the phobic group during CVE, baseline activity of task-positive regions (e.g., DLPFC panel) in response to neutral stimuli was higher relative to target activity than in the other conditions, producing a net reduction in activation of those task-positive regions (Figs. 2 and 3). Beta values also indicated that CV spiders activated the subcortical emotion system more strongly in control than phobic participants, and deactivated regions supporting emotion regulation and higher-order language in phobic participants (Fig. 2), by suppressing activity of these regions in the phobic group (amygdalae, VMPFC, anterior VLPFC, bilateral MTG).

Beta values indicated that activations during VBE in phobic participants were driven by increased response to VB spiders (e.g., DLPFC and right amygdalae panels). Although VMPFC beta values for VB spiders exceeded those for CV spiders and VB flowers in phobic participants, higher baseline activity in response to neutral stimuli produced a net deactivation of the VMPFC in the phobic group (Fig. 2).

Changes in activation of regions of interest (ROIs) across the conditions

The left panel of Figure 6 shows the activation time courses of ROIs that prior imaging studies have implicated in fear activation and regulation: the right and left amygdala, and the ventral medial prefrontal cortex (VMPFC), respectively (see "Analysis of ROIs," p. 14). For the sake of brevity, only relevant interaction effects are presented. In phobic participants, activity of the right amygdala decreased

**Figure 6.**

The left panel shows BOLD response of the right amygdala and of the VMPFC across blocks of VBE and CVE to spiders in the phobic group. BOLD response of the right amygdala decreased significantly across blocks of VBE in the phobic group, and did not change significantly across blocks of CVE or blocks of VB flowers. VMPFC activity dropped precipitously from early to middle blocks of CVE to spiders in the phobic group, and did not change significantly across blocks of VBE to spiders or of VB flowers. The right panel shows voxel-wise, whole-brain correlations of neural activity during CVE to spiders with on-line fear ratings, and of activity during VBE to spiders with scores for

cognitive interference caused by spider words, as measured by the Spider Stroop task given prior to fMRI scanning. CVE, clearly visible exposure. VBE, very brief exposure. Stroop, Spider Stroop task. Proceeding from top to bottom in each row showing a condition-measure pair, the labels identify the following regions. *CVE-fear ratings row:* OFC, orbital frontal cortex; Caud, caudate; VLPFC, ventral lateral prefrontal cortex. A. Ins, anterior insula; DLPFC, dorsolateral prefrontal cortex; MFG, middle frontal gyrus; LPar, lateral parietal cortex; PreCu, precuneus. *VBE-Stroop row:* STG, superior temporal gyrus; MTG, middle temporal gyrus; Ins, insula; DMPFC, dorsal medial prefrontal cortex.

significantly across blocks of VB spiders $F(3,60) = 2.86$, $P = 0.044$, $\eta^2 = 0.35$ (linearly, $F(1,20) = 5.19$, $P = 0.034$, $\eta^2 = 0.45$), and did not change across blocks of CV spiders, $F(3,60) = 1.11$, $P = 0.353$, or of VB Flowers, $F < 1$. Contrastingly, VMPFC activity dropped precipitously from early to middle blocks of CV spiders in phobic participants, $t(20) = 2.31$, $P = 0.032$, and did not change across blocks of VB spiders or of VB flowers ($F < 1$).

Correlation analyses of behavioral measures with neural activity

The right panel of Figure 6 shows voxel-wise correlations of neural activity of the exposure conditions with the explicit and implicit measures of fear: fear ratings given after each block of stimuli during fMRI scanning, and the Spider Stroop task given prior to fMRI scanning. Statistical

and clustering thresholds were the same as for the functional imaging data.

Fear ratings during CVE to spiders strongly inversely correlated with activation of task positive regions, and positively correlated with deactivation of DMN regions. Greater fear was associated with less activation of the OFC and insula (affective evaluation), vLPFC and caudate (regulatory functions), DLPFC (attention), and with greater deactivation of DMN regions by CVE in the phobic group. Fear ratings of the phobic group in response to neither VBE to spiders nor VB flowers correlated with neural activations.

Spider Stroop scores—color-naming interference caused by spider words, an implicit measure of fear—were strongly, inversely correlated with activation of several regions by VBE to spiders in the phobic group. Greater cognitive interference was associated with less activation

of regions by VBE: the occipital cortex (vision), DLPFC and bilateral superior parietal cortices (attention), insula and DMPFC (affective evaluation), superior and middle temporal gyri (language). Neither CVE to spiders nor VBE (control) yielded significant correlations of Spider Stroop scores with neural activations in phobic participants.

Phobic beliefs, as assessed by the FSQ, modestly correlated with activations by CVE to spiders. Approaching the tarantula modestly correlated with activations by VBE to spiders. See Supporting Information Figure S2 in section SM2 of the Supporting Information for brain maps of these correlations.

DISCUSSION

Synthesis and Interpretation of Findings

We investigated the neural basis for the adaptive effects of very brief exposure (VBE)—the repeated presentation of masked phobic stimuli—by comparing the effects of VBE to spiders, clearly visible exposure (CVE) to the same images of spiders, and masked, very brief flowers (VBF; control) on the neural activity of spider-phobic and control participants.

Counter-intuitively, CVE to spiders activated task-driven, cortical affective evaluation, and subcortical emotion systems more strongly in control than in phobic participants (Fig. 2). These findings contrast with reviews of imaging studies of Specific Phobia showing that visible feared stimuli activate emotion systems in particular [Del Casale et al., 2012; Linares et al., 2012]. Beta coefficients indicated that weaker activation of task-driven regions (e.g., occipital cortex, DLPFC) in phobic participants during CVE than VBE was driven by higher baseline activity of corresponding regions in response to neutral stimuli during CVE (Fig. 5), which reduced contrasts in neural activity between blocks of spider and neutral stimuli, thereby weakening activations. These findings suggest that visible spiders produced sustained vigilance in phobic participants - when blocks of ambiguous neutral stimuli (scrambled pieces of the target stimuli) were presented immediately after blocks of visible spiders. A substantial literature attests to hypervigilance by phobic persons [Bar-Haim et al., 2007; Mogg et al., 2004; Mogg and Bradley, 2002; Rinck and Becker, 2006; Teachman et al., 2012; Williams et al., 1997].

By contrast, beta coefficients indicated that CVE activated a subcortical emotion system more strongly in control participants (Fig. 2) because visible spiders reduced activity of corresponding regions (e.g., amygdalae; Fig. 5, “active task”) in phobic participants. Beta coefficients similarly indicated that CVE deactivated ventral PFC regions supporting emotion regulation and temporal regions supporting higher-order language in phobic participants (Fig. 2) because visible spiders reduced activity of these regions (Fig. 5). Correspondingly, CVE caused phobic participants

to experience significant fear, and BOLD response of the VMPFC dropped precipitously in early blocks of CVE (Fig. 6). Collectively, these findings suggest that CVE induced patterns of neural activity associated with deficient fear regulation.

Whereas CVE to spiders activated the subcortical emotion system more strongly in control than phobic participants, VBE to spiders uniquely activated this system more strongly in phobic than control participants—that is, feared stimuli specifically engaged the subcortical emotion system *when recognition of them was severely limited*. (Funneled interviews given immediately after each condition showed that both groups were much less likely to identify spiders during VBE than during CVE, and as likely to identify spiders during VBE and VBF.) Consistently, only VBE—neither CVE nor VB flowers—activated subcortical emotion, vision, and attention systems, and regions supporting higher-order language, more strongly in phobic participants than controls (Fig. 2). That these diagnostic group contrasts in neural activity were specific to VBE shows that masking feared stimuli conferred greater exposure-related activity in phobic participants that would have otherwise been reduced (as occurred during CVE to spiders). Limiting recognition of feared stimuli facilitated their processing. Consistently, VBE did not induce fear in phobic participants, and generated patterns of neural activity associated with cognitive control (i.e., less cognitive interference, as indexed by Spider Stroop scores). These findings suggest that VBE induced neural activity associated with emotion regulation in phobic participants. Masking exposure to phobic stimuli may reduce threat vigilance, allowing the salience of phobic stimuli to activate and possibly desensitize fear-processing neural systems, thereby preventing the experience of fear.

Direct contrasts of CVE and VBE to spiders further illustrated how masking phobic stimuli conferred greater exposure-related processing (Fig. 3). In phobic participants, VBE activated, and CVE deactivated, regions that prototypically support emotion regulation and higher-order language. Similarly, VBE activated attention, affective and motor control systems more strongly than CVE. The counterintuitive finding of stronger effects of weaker—masked—stimuli are considered to be the most valid indicator of automatic processing [Wiens, 2006]. Thus, these findings suggest that phobic participants processed spiders automatically during VBE. CVE and VBE to spiders showed consistent dissociations in effects on ROIs in phobic participants: whereas VMPFC activity dropped precipitously during CVE and right amygdala activity did not change, right amygdala activity significantly decreased during VBE and VMPFC activity did not change. Whereas CVE caused phobic participants to experience significant fear, and generated neural activity that strongly correlated with fear ratings—explicit fear, VBE did not induce fear and generated activity that strongly inversely correlated with color-naming interference—implicit fear (Fig. 6).

These multiple dissociations between the effects of CVE and VBE suggest that phobic participants consciously processed spiders during CVE, which induced fear, and automatically processed spiders during VBE, which was associated with fear regulation.

While contrasts in neural activity between masked phobic and fear-irrelevant stimuli—VBE and VBF—were not as pronounced as in prior studies, the latter stimuli—“spider-flowers”—were quite similar to the phobic stimuli in visual features (Fig. 1). Nonetheless, VBE activated subcortical emotion, vision and attention systems and regions supporting higher-order language more strongly in phobic than in control participants (Fig. 2), whereas VB flowers did not generate group contrasts (Fig. S1 in section SM2 of Supporting Information). In direct contrasts of these masked conditions in the phobic group, VBE to spiders deactivated DMN regions, and activated regions supporting affective processing and attention more than VB flowers (Fig. 4). These findings suggest that the brain distinguished between similar phobic and fear-irrelevant stimuli despite limited conscious recognition; that is, masking exposure to phobic stimuli engaged processing of emotional salience.

Relatedly, VBE and CVE to spiders both deactivated Default Mode Network (DMN) regions in phobic participants (Figs. 2 and 3), which subserves internally focused activities (e.g., daydreaming). DMN activity declines when processing task-active relative to neutral stimuli, producing a “deactivation” of the DMN [Raichle et al., 2001]. To our knowledge, *deactivation of the DMN by masked phobic stimuli has not been reported previously*. This finding also suggests that masked exposure engages processing of emotional salience.

Limitations and Conclusions

These findings and interpretations must be considered in the context of limitations.

Prior presentation of CVE to spiders may have affected responses to VBE or VBF. If so, VBE would have generated similar patterns of neural activity as CVE, particularly in phobic participants. Thus, carryover effects would weaken findings, not produce spurious ones. However, CVE and VBE to spiders generated quite different patterns of activity in phobic participants, had different effects on fear ratings, and correlated with explicit versus implicit measures of fear, respectively, suggesting that carryover effects were minimized.

Regardless, a limitation of the within-subjects design is that it only allows us to associate the exposure conditions with patterns of brain activity. It does not allow us to conclude causal mechanisms or directions, which would require experimental manipulation of the exposure conditions as in a randomized controlled trial (i.e., randomization, blinding), which will be the focus of future studies.

Another limitation was that participants did not give trial-wise responses to the stimuli. This was done to

preserve the ecological validity of the exposure task. In VBE, phobic participants are instructed just to focus on—rather than respond to—repeated trains of masked spider images, which has been shown to reduce their avoidance of a live tarantula in prior studies (see Introduction). The study also lacked an objective measure of response to the stimuli, such as eye tracking or a physiological measure. After quickly fixating on spiders, phobic individuals tend to avert gaze [Rinck and Becker, 2006], which may account for reduced activations by CVE to spiders in this group. However, phobic participants rated higher levels of fear after each of 16 blocks of CVE than VBE to spiders, suggesting that they attended to CV spiders. Further, beta coefficients for visual and attentional regions should not be significantly higher during blocks of CV spiders (Fig. 6, DLPFC, “Active” bar) than blocks of neutral stimuli if phobic participants averted gaze when the former stimuli were presented. Consistently, in the funneled interview given immediately after each condition, phobic participants reported that they were able to remain focused when CV spiders were presented. We opted for a self-reported (fear rating) rather than physiological measure of response to the stimuli because our prior studies have shown that phobic participants’ subjective experience of VBE determines whether its therapeutic effects occur, and that CVE induces sympathetic arousal in phobic participants whereas VBE does not (see Introduction). On-line fear ratings provided a naturalistic, clinically relevant index of emotional reactivity to the stimuli.

In addition to the connection to prior behavioral studies attesting to the fear-reducing effects of VBE, our findings are consistent with a recent fMRI study that found that fear responses to conditioned stimuli (CS+s) were reduced by pairing rewards with activity patterns in the visual cortex matching the CS+s, even though the participants were not aware they were viewing these stimuli [Koizumi et al., 2016]. However, these were normal participants who were temporarily fear conditioned. Participants in the current study, by contrast, were clearly spider phobic as shown by meeting DSM-V criteria for Specific Phobia and by exhibiting avoidance of a live tarantula. Regardless, these converging findings from different research paradigms suggest that exposure procedures based on unconscious processing may lead to novel treatments for fear-related disorders.

In this study, less was more. The multiple dissociations between the effects of masked and visible exposure to phobic images—VBE and CVE—on patterns of neural activity, experienced fear, and correlations with explicit versus implicit measures of fear suggest that limiting awareness of exposure more strongly engaged the processing of phobic stimuli. Counter-intuitively, CVE to feared stimuli produced greater activity of emotion processing systems and emotion regulation regions in control than in phobic participants, and sustained threat vigilance and induced fear in phobic participants. Masking exposure to

feared stimuli (VBE), by contrast, produced greater activity in emotion processing systems and regulatory regions and did not induce fear in phobic participants. Masking exposure may reduce vigilance to threat, allowing the salience of phobic stimuli to activate fear processing systems automatically, while simultaneously preventing the experience of fear. Future studies are needed to clarify the fear regulatory mechanisms of masked exposure (e.g., extinction, desensitization), and to test the hypothesis suggested by our findings: masked exposure engages emotional salience processing in phobic persons for an adaptive purpose, the recruitment of regulatory systems that inhibit fear.

ACKNOWLEDGMENTS

The research was made possible by the provision of MRI data by New York State Psychiatric Institute and Columbia University, New York, NY.

Supplemental funding for MRI scans was provided by a Research Grant from the Fund for Psychoanalytic Research of the American Psychoanalytic Association, and Faculty Support Awards from Purchase College to Dr. Paul Siegel. Collection of crucial pilot data was funded by grants from the Society for Neuropsychanalysis and from the International Psychoanalytic Association to Dr. Paul Siegel.

REFERENCES

- Alpers GW, Gerdes AM, Lagarie B, Tabbert K, Vaitl D, Stark R (2009): Attention and amygdala activity: An fMRI study with spider pictures in spider phobia. *J Neur Trans* 116:747–757.
- Amunts K, Kedo O, Kindler M, Pieperhoff P, Mohlberg H, Shah NJ, Habel U, Schneider F, Zilles K (2005): Cytoarchitectonic mapping of the human amygdala, hippocampal region and entorhinal cortex: intersubject variability and probability maps. *Anat and Embryology* 210:343–352.
- Balderston NL, Helstetter FJ (2010): Conditioning with masked stimuli affects the time course of skin conductance responses. *Behav Neurosci* 4:478–489.
- Bar-Haim Y, Lamy D, Pergamin L, Bakermans-Kranenburg MJ, van IJzendoorn MH (2007): Threat-related attentional bias in anxious and nonanxious individuals: A meta-analytic study. *Psychol Bull* 133:1–24.
- Carlsson K, Petersson KM, Lundqvist D, Karlsson A, Ingvar M, Öhman A. (2004): Fear and the amygdala: Manipulation of awareness generates differential cerebral responses to phobic and fear-relevant (but nonfeared) stimuli. *Emotion* 4:340–353.
- Del Casale A, Ferracuti S, Rapinesi C, Serata D, Piccirilli M, Savoja V (2012): Functional neuroimaging in Specific Phobia. *Psychiatry Res: Neuroimaging* 202:181–197.
- Delgado MR, Nearing KI, LeDoux JE, Phelps EA (2008): Neural circuitry underlying the regulation of conditioned fear and its relation to extinction. *Neuron* 59:829–838.
- Eklund A, Nichols TE, Knutsson H (2016): Cluster failure: Why fMRI inferences for spatial extent have inflated false positive rates. *PNAS* 113:7900–7905.
- Esteves F, Dimberg U, Öhman A (1994): Automatically elicited fear: Conditioned skin conductance responses to masked facial expressions. *Cog Emot* 8:393–413.
- Etkin A, Klemenhagen KC, Dudman JT, Rogan MT, Hen R, Kandel ER, Hirsch J (2004): Individual differences in trait anxiety predict the response of the basolateral amygdala to unconsciously processed fearful faces. *Neuron* 44:1043–1055.
- First MB, Spitzer RL, Gibbon M, Williams JBW (1997): Structured Clinical Interview for DSM-IV Axis I Disorders. Washington, DC: American Psychiatric Association.
- Friston KJ, Penny W (2003): Posterior probability maps and SPMs. *NeuroImage* 19:1240–1249.
- Friston KJ, Glaser DE, Henson RA, Kiebel S, Phillips C, Ashburner J (2002): Classical and bayesian inference in neuroimaging: Applications. *NeuroImage* 16:484–512.
- Fyer AJ (1998): Current approaches to etiology and pathophysiology of specific phobia. *Biological Psychiatry* 44:1295–1304.
- Hermann A, Schäfer A, Walter B, Stark R, Vaitl D, Schienle A (2009): Emotion regulation in spider phobia: Role of the medial prefrontal cortex. *SCAN* 4:257–267.
- Katkin ES, Wiens S, Ohman A (2001): Nonconscious fear conditioning, visceral perception, and the development of gut feelings. *Psychol Sci* 12:366–370.
- Klein TA, Neumann J, Reuter M, Hennig J, von Cramon DY, Ullsperger M (2007): Genetically determined differences in learning from errors. *Science* 318:1642–1645.
- Koizumi A, Amano K, Cortese A, Shibata K, Yoshida W, Seymour B, Kawato M, Lau H (2016): Fear reduction without fear through reinforcement of neural activity that bypasses conscious exposure. *Nature Hum Behavior* 1:0006.
- Larson CL, Schaefer HS, Siegle GJ, Jackson CA, Anderle MJ, Davidson RJ (2006): Fear is fast in phobic individuals: Amygdala activation in response to fear-relevant stimuli. *Biol Psychiatry* 60:410–417.
- Leuken U, Kruschwitz JD, Muehlhan M, Siegert J, Hoyer J, Wittchen HU (2011): How specific is specific phobia? Different neural response patterns in two subtypes of specific phobia. *NeuroImage* 56:363–372.
- Linares IP, Trzesniak C, Chagas MN, Hallak JC, Nardi AE, Crippa JS (2012): Neuroimaging in specific phobia disorder: A systematic review of the literature. *Rev Bras Psiquiatria* 34:101–111.
- Lipka J, Miltner WR, Straube T (2011): Vigilance for threat interacts with amygdala responses to subliminal threat cues in specific phobia. *Biol Psychiatry* 70:472–478.
- Magee WJ, Eaton W, Wittchen H, McGonagle KA, Kessler RC (1996): Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey. *Arch Gen Psychiatry* 53:159–168.
- Mogg K, Bradley BP (2002): Selective orienting of attention to masked threat faces in social anxiety. *Behav Res Ther* 40:1403–1414.
- Mogg K, Philippot P, Bradley BP (2004): Selective attention to angry faces in clinical social phobia. *J Abnorm Psychol* 113:160–165.
- Morris JS, Öhman A, Dolan RJ (1998): Conscious and unconscious emotional learning in the human amygdala. *Nature* 393:467–470.
- Morris JS, Öhman A, Dolan RJ (1999): A subcortical pathway to the right amygdala mediating “unseen” fear. *Proc Natl Acad Sci* 96:1680–1685.
- Neumann J, Lohmann G (2003): Bayesian second-level analysis of functional magnetic resonance images. *NeuroImage* 20:1346–1355.
- Newman LS, McKinney LC (2002): Repressive coping and threat avoidance: An idiographic stroop study. *Pers Soc Psychol Bull* 28:409–422.

-
- Öhman A, Mineka S (2001): Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning. *Psychol Rev* 108:483–522.
- Öhman A, Soares J (1993): On the automatic nature of phobic fear: Conditioned electrodermal responses to masked fear-relevant stimuli. *J Abnorm Psychol* 102:121–132.
- Öhman A, Soares J (1994): "Unconscious anxiety": Phobic responses masked stimuli. *J Abnorm Psychol* 103:231–240.
- Öhman A, Soares J (1998): Emotional conditioning to masked stimuli: Expectancies for aversive outcomes following non-recognized fear-relevant stimuli. *J Exp Psychol: Gen* 127: 69–82.
- Phelps EA, Delgado MR, Nearing KI, LeDoux JE (2004): Extinction learning in humans: Role of the Amygdala and vmPFC. *Neuron* 43:897–905.
- Raichle ME, MacLeod AM, Snyder AZ, Powers WJ, Gusnard DA, Shulman GL (2001): A default mode of brain function. *Proc Natl Acad Sci* 98:676–682.
- Rinck M, Becker ES (2006): Spider fearful individuals attend to threat, then quickly avoid it: Evidence from eye movements. *J Abnorm Psychol* 115:231–238.
- Schweckendiek J, Klucken T, Merz CJ, Tabbert K, Walter B, Ambach W, Vaitl D, Stark R (2011): Weaving the (neuronal) web: Fear learning in spider phobia. *NeuroImage* 54: 681–688.
- Siegel P, Gallagher KA (2015): Delaying in vivo exposure to a tarantula with very brief exposure to phobic stimuli. *J Behav Ther Exper Psychiatry* 46:182–188.
- Siegel P, Warren R (2013a): The effect of very brief exposure on the subjective experience of fear induced by *in vivo* exposure. *Cog Emotion* 27:1013–1022.
- Siegel P, Warren R (2013b): Less is still more: Maintenance of the very brief exposure effect one year later. *Emotion* 13: 338–344.
- Siegel P, Weinberger J (2009): Very brief exposure: The effects of unreportable stimuli on fearful behavior. *Consc Cognit* 18:939–951.
- Siegel P, Weinberger J (2012): Less is more: The effects of very brief versus clearly visible exposure on spider phobia. *Emotion* 12:394–402.
- Siegel P, Anderson JF, Han E (2011): Very brief exposure II: The effects of unreportable stimuli on phobic behavior. *Consc Cognit* 20:181–190.
- Szymanski J, O'Donohue W (1995): Fear of spiders questionnaire. *J Behav Ther Exper Psychiatry* 26:31–34.
- Teachman BA, Joormann J, Steinman SA, Gotlib IH (2012): Automaticity in anxiety disorders and major depressive disorder. *Clin Psychol Rev* 32:575–603.
- Weinberger J, Siegel P, Siefert C, Drawl J (2011): What You Can't See Can Help You. *Consc Cognit* 20:173–180.
- Whalen PJ, Rauch SL, Etcoff NL, McInerney SC, Lee MB, Jenike MA (1998): Masked presentations of emotional facial expressions modulate amygdala activity without explicit knowledge. *J Neurosci* 18:411–418.
- Whalen PJ, Kagan J, Cook RG, Davis FC, Kim H, Polis S, McLaren DG, Somerville LH, McLean AA, Maxwell JS, Johnstone T (2004): Human amygdala responsivity to masked fearful eye whites. *Science* 306:2061.
- Wiens S (2006): Current concerns in visual masking. *Emotion* 6: 675–680.
- Williams JG, Matthews A, Macleod C (1996): The emotional stroop task and psychopathology. *Psychol Bull* 120:3–24.
- Williams JMG, Watts FN, MacLeod C, Mathews A (1997): *Cognitive Psychology and Emotional Disorders*, 2nd ed. Chichester, England: John Wiley & Sons, Inc.
- Williams LM, Das P, Liddell BJ, Kemp AH, Rennie CJ, Gordon E (2006): Mode of functional connectivity in amygdala pathways dissociates level of awareness for signals of fear. *J Neurosci* 26: 9264–9271.
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DATES	INSTITUTION	DEGREE CONFERRED
1962-1965	University of Texas	B.A. (Speech Communication)
1965-1967	University of Texas	M.A. (Speech Communication)
1967-1970	Pennsylvania State University	Ph.D. (Communication)

EMPLOYMENT

DATES	POSITION	INSTITUTION
1964-1967	Teaching Asst.	University of Texas
1967 & 1968	Research Assoc.	" " "
1967-1970	Instructor	Pennsylvania State University
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1971-1977	Asst. & Assoc. Prof.	California State Univ., Los Angeles
1977-1982	Assoc. Prof.	Ohio State University
1982-1985	Assoc. Professor	University of California at Davis
1985-2010	Professor	" " " " "
2010 --	Professor Emeritus	" " " " "

ADMINISTRATIVE EXPERIENCE

1975-77, Chair, Communication Area, Department of Speech Communication (Communication,

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1986 -91, Chair, Department of Rhetoric and Communication, University of California at Davis

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HONORS

- Recognized as among "Top 1%" of Scholars in Communication during the '70's and '80's," Eastern States Comm. Assn., 1987.
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- "Top Three" Honors, Speech and Language Sciences Division, Speech Communication Assn. Convention papers; 1976, 1978, 1980, 1981
- "Top Three" Honors, Interpersonal Communication Division, Speech Communication Assn. Convention papers; 1991
- "Top Four" Honors, Pedagogy Division, Speech Communication Assn. Convention papers; 1995
- "Top Three" Honors, Information Systems Division, International Communication Assn. Convention papers; 1978, 1983
- "Top Three" Honors, Language Behavior Interest Group, Western Speech Communication Assn. Convention papers; 1981, 1986, 1989
- Recipient, Social and Behavioral Sciences Research Fellow Award, Ohio State University, 1978.
- Recipient, B. Aubrey Fisher Award (Best Article), Western Speech Communication Association, 1987 (for Motley, "Consciousness and Intention . . .," WJSC, 1986).
- Recipient, B. Aubrey Fisher Award (Best Article), Western States Communication Association, 1991 (for Motley, "On Whether...", WJSC, 1990).
- Runner-up, B. Aubrey Fisher Award, 1988 (for Motley & Camden, "Facial Expression of Emotion...", WJSC, 1988).
- Distinguished Article Award, Applied Communication Division, SCA, 1996, for Motley & Reeder, "Unwanted escalation . . ."
- W.N. Thompson Memorial Lecturer, Western Illinois University, 1993.
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Vice Chair Elect, Speech Sciences Division, 1974-75
Vice Chair, Speech and Language Sciences Division, 1975-76
Chair, Speech and Language Sciences Division, 1976-77
Member, Legislative Council, 1977, 1978
Member, Nominating Committee, Rhetorical and Communication Theory
Division, 1974-75
Chair, Nominating Committee, Speech and Language Sciences Division, 1977-78
Editorial Board, Proteus, 1974-76
Editorial Board, ERIC, 1975-86
Associate Editor, Communication Monographs, 1988-91

Western Speech Communication Association
Chair, Language Behavior Interest Group, 1974-75, 1975-76
Member, Legislative Assembly, 1975, 1976, 1988, 1989
Chair, State Membership Committee, 1976
Associate Editor, Western Journal of Speech Communication, 1985-92
Guest Editor, Western Journal of Speech Communication, 1986 Special Section
Delegate at Large, Legislative Assembly, 1988

PROFESSIONAL SERVICE (contd.)

OFFICES AND COMMITTEES (contd.)

Society for Cognition and Brain Theory
Member, Steering Committee, 1981-84

Eastern Communication Association
Editorial Board, Communication Quarterly, 1979-81
Associate Editor, Communication Quarterly, vol. 29:1, 1981
Associate Editor, Communication Quarterly, 1982-84

International Communication Association
Associate Editor, Communication Yearbook, 1984
Associate Editor, Human Communication Research, 1986-91

REFEREE

Communication Monographs; 1981, 1982 (2), 1983 (2), 1984 (3), 1985 (3), 1993, 1994, 1995, 2000
Journal of Broadcasting; 1980, 1981, 1982
Western Journal of Speech Communication; 1973, 1974 (2), 1975, 1976, 1978, 1981 (4), 1982 (2), 1983 (6), 1984 (11), 1984 (19), 1997 (1), 2001, 2002
Communication Quarterly; 1979 (9), 1980 (10), 1981 (21), 1983 (5), 1998, 2001
Southern Speech Journal; 1977, 1981, 1988
Psychological Review; 1985
National Science Foundation; 1985, 1986, 1989, 1990, 1992
St. Martin's Press, 1990, 1992
Journal of Language and Social Psychology, 1993, 1999, 2001, 2002
Communication Studies, 1992, 2000
Communication Research, 1992, 1995, 1999
Guggenheim Foundation, 1989
Burgess Publishers, 1988, 1989
Journal of Social Behavior and Personality, 1989, 2001
Dimension Series, Speech Communication Association; 1974, 1978
Speech and Language Sciences Division, SCA/NCA; 1975, 1976, 1977, 1983, 1999
Language Behavior Interest Group, WSCA; 1975, 1976, 1977, 1993
Information Systems Division, International Communication Association; 1983
Wadsworth Publishers, 1992, 1994, 2001
Mayfield Publishing, 1995, 1996, 2000

CONVENTION PANEL CHAIR AND/OR CRITIC

Speech Communication Association; 1972, 1975, 1976, 1977, 1978, 1980, 1985, 1992, 1995
Western Speech Communication Association; 1973, 1974, 1975, 1976, 1992, , 1993, 1994
International Communication Association; 1984

PUBLICATIONS SUMMARIZED

(Detailed List Available at
<http://communication.ucdavis.edu/people/fzmotley>
 -- Click on Curriculum Vitae)

SUBJECTS	ARTICLES, MAJOR JRNLs, COMPETITIVELY SELECTED 1st (2nd) AUTHOR	ARTICLES, MINOR JOURNALS, COMPETITIVELY SELECTED 1st (2nd) AUTHOR	BOOK CHAPTERS, INVITED ARTICLES, MAJOR JOURNALS 1st (2nd) AUTHOR	INVITED ARTICLES, MINOR JOURNALS 1st (2nd) AUTHOR	BOOKS 1st (2nd) AUTHOR
PUBLIC SPEAKING ANXIETY	2	1	4		3 (1)
SLIPS OF THE TONGUE & DOUBLE ENTENDRES	15 (2)	1 (1)	6		
OTHER PSYCHOLINGUISTIC	2 (1)	(1)		(2)	
INTERPERSONAL COMM: SEXUAL INTIMACY	5				1
FORENSIC COMMUNICATION	3		1		1
LANGUAGE	4 (2)	2	2		1
OTHER	3				

PAPERS PRESENTED

(Detailed List Available at
<http://communication.ucdavis.edu/people/fzmotley>
 -- Click on Curriculum Vitae)

COMPETITIVELY SELECTED

American Association for the Advancement of Science	2
National Communication Association	39
Western States Communication Association	22
Symposium on Automatic Control and Autonomous Computing	1
Midwestern Psychological Association	1
Western Psychological Association	4
International Congress of Linguists	1
International Communication Association	9
Psychonomic Society	1
Eastern Communication Association	4

INVITED

National Communication Association	4
Salk Institute	1
Various Universities as Distinguished Visiting Lecturer	<u>16</u>
	105

=====

SUBJECTS

Slips of the Tongue, Double Entendres – 38
Psycholinguistics - 5
Research Methods – 15
Forensic Communication – 1
Nonverbal Communication – 4
Deception – 3
Ethics – 4
Interpersonal Communication Research - 3
Verbal Sexual Coercion – 6
Male-Female Misunderstanding - 3
Language, Semantics - 9
Public Speaking Anxiety – 10
Public Speaking Pedagogy - 4

EXHIBIT 2

STATE OF MICHIGAN
IN THE COURT OF APPEALS

SARAH DEMING,

Plaintiff/Appellant,

v.

CH NOVI LLC d/b/a EMAGINE NOVI
and FILMDISTRICT DISTRIBUTION LLC,

Defendants/Appellees.

Court of Appeals No. 309989
Oakland County Circuit Court
No. 11-122030-CZ
Hon. Daniel P. O'Brien

AFFIDAVIT OF ELIE MOSSERI

I, Elie Mosseri, being duly sworn, state that the following is true to the best of my knowledge, information, and belief, and is based on my personal knowledge unless otherwise indicated:

1. If called to the stand, I am competent to testify to the contents herein.
2. I have been in the telecommunications industry for twenty-eight years.
3. My resume is attached.

4. I have reviewed the video DVD provided to Martin H. Leaf, Esq. by James Stewart, counsel for Defendants FilmDistrict and CH NOVI¹, "STEWART-DVD".
5. I have reviewed the Blu Ray version of *Drive*.
6. I have reviewed the standard definition version of the motion picture *Drive*.
7. I have reviewed the affidavit of Alan R. Friedman, attorney for Defendants.
8. I have reviewed the affidavit of Roni Olivares.
9. I have reviewed the affidavit of Bill Wohlken.
10. The statement in the affidavit of Roni Olivares, paragraph 5 is false:

As part of my review of the film elements delivered to
FilmDistrict by the producers, I personally screened DVD

¹ Martin H. Leaf, Esq. indicated to me that James Stewart provided to Martin H. Leaf the "STEWART-DVD"

copies created from the HD master twice and confirmed that the version of the movie on the DVD was identical to the version delivered to FilmDistrict. Accordingly, any DVD screener made with a 2.40 aspect ratio, from the HD master without modification would be identical.

11. The aforementioned statement by Roni Olivares is false because the STEWART-DVD is not identical to the version of *Drive* shown by CHNOVI for the following reasons:

- i. CH NOVI used surround sound. The STEWART-DVD is stereo.
- ii. CH NOVI showed a 1920 by 1080p HD version. The STEWART-DVD showed a 720 by 480 anamorphic, which is not HD, which the CHNOVI version was.
- iii. The CH NOVI version was less compressed than the STEWART-DVD, resulting in the CHNOVI version having much better image quality compared to the STEWART-DVD.
- iv. The CH NOVI version was 24 frames per second, the STEWART-DVD was 29 frames per second.
- v. The CH NOVI version was high quality high definition. The STEWART-DVD was substantially poorer in quality than SD (Standard Definition).
- vi. The process of reducing the quality of the STEWART-DVD was intentional.

12. The differences between the CH NOVI version and the STEWART-DVD resulted in visual and audio content that was detectable in the CH NOVI version, and not detectable or much less detectable in the STEWART-DVD. In addition, content would be much harder to find in the STEWART-DVD.

13. In the CH NOVI version, around the thirty-two minute mark, using Digital DTS audio, there is a loud noticeable ominous thunderous sound when Bernie Rose talks to Driver, ending with: “..we’re a team now, ...I’m excited. Nino get the fuck out of here”. This loud noticeable, ominous thunderous sound is much less noticeable, if at all, in the STEWART-DVD. This sound, when perceived, changes the meaning of that scene. As a result, viewers of the CH NOVI version would be much more likely to perceive Bernie Rose’s words as threatening, which would be much less likely in the STEWART-DVD. This is based on my knowledge and experience with such types of sound to create a mood. Such use of sound is very common.

14. The poster “Black Magic The Shine That gets Noticed”, cannot be read on the STEWART-DVD, but can be read in two different scenes in the CH NOVI version (Exhibits 3.1 and Exhibits 3.2, which are divided between the CH NOVI version and the STEWART-DVD). .

15. I did not notice until it was pointed out to me, that *Driver* was almost always illuminated in some form, including halos. This was not true of the other characters, and therefore the sign that reads: "Black Magic The Shine That Gets Noticed", next to *Driver*, had significance in my opinion.

16. A faint outline of an animal's head, and a butcher knife/cleaver, can be seen in the CH NOVI version, but is not as perceptible, if at all, in the STEWART-DVD.

(Exhibits 3.3 and Exhibits 3.4, which are divided between the CH NOVI version and the STEWART-DVD).

17. The details of the charity box can be made out in the CH NOVI version, but are much harder to discern in the STEWART-DVD, if at all. These details in the CH NOVI version include the fact that the charity box has the same "Goodwill Halloween" design as the sign outside Nino's Pizzeria, and is empty. A "fetish" director such as Refn would have specifically chosen to show an empty charity box of that type, for whatever message in Refn's mind that empty charity box conveys. An empty charity box is consistent with the universal stereotype that Jews are cheap, and perhaps took the change for themselves, or never contributed to the box in the first place.

RECEIVED by Michigan Court of Appeals 9/17/2013 1:56:04 PM

(Exhibits 3.5 and Exhibits 3.6, which are divided between the CH Novi version and the STEWART-DVD).

18. The affidavit of Bill Wahlkin is false for the same reasons as the affidavit of Roni Oliveres.

19. The affidavit of Alan R. Friedman is false or misleading because the quality of the DVD and the images contained therein, are not of sufficient quality to be sold or rented to the public, or shown in a theatre, or shown in a public viewing, for the reasons stated above.

20. All references to the CH NOVI version are based on the IMDB specifications, and the blu-ray version or iTunes HD version that I have viewed many times on an HD monitor, with surround sound equipment. I do not own or have access to the CH NOVI version of *Drive*.

21. Defendant CH NOVI would have known that the STEWART-DVD was materially different than the CH NOVI version. I define materially different to be different enough that the STEWART-DVD could not be shown in a theatre that charged for admission.

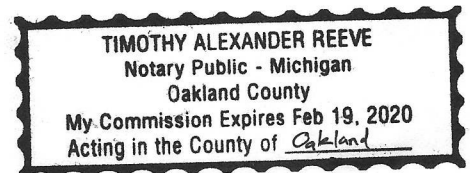
22. In generating the Exhibits 3.1 through 3.6, I used Microsoft Expression screen capture, rendered to the highest quality setting .wmv file, which was read into Sony Vegas Pro12, and then a frame was captured using the best quality settings. The Sony Vegas Pro Project setting used 1920 x 1080 x 32, 29.97fps. The input for the "CH NOVI" version was iTunes HD *Drive*. The input for the "STEWART-DVD", was the STEWART-DVD played on the VCL player. The computer used was an HP Pavillion DV7 Notebook, Product number: LW178UA#ABA.



Elie Mosseri

Subscribed and sworn to by Elie Mosseri before me on the 17th day of September, 2013.

Signature: _____

Notary Public, Michigan, County of _____

My commission expires: Feb. 19, 2020



EXHIBIT 3

STATE OF MICHIGAN
IN THE SIXTH JUDICIAL CIRCUIT

Sarah Deming – an individual

Plaintiff,

-v-

Case No. 11-122090-CZ
Hon. Daniel O'Brien

CH NOVI LLC, a Michigan Limited
Liability company d/b/a EMAGINE NOVI
and **FILMDISTRICT DISTRIBUTION, LLC**, A
California Limited Liability Company,

Joint and Several Defendants

MARTIN H. LEAF PLLC
Martin H. Leaf (P43202)
2055 Orchard Lake Road
Sylvan Lake, MI 483220
Tel: 248-687-9993
leafmartin@gmail.com
Attorneys for Plaintiff

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Jonathan Rotenberg (admitted pro hac vice)
575 Madison Avenue
Tel.: 212-940-8800
Alan.Friedman@kattenlaw.com
Jonathan.Rotenberg@kattenlaw.com

THOMPSON & KNIGHT LLP
James E. Stewart (P23254)
39533 Woodward Ave., Ste. 320
Bloomfield Hills, MI 48304
Tel.: 248-258-7900
James.Stewart@tklaw.com


AFFIDAVIT OF DR. FRAN PARKER

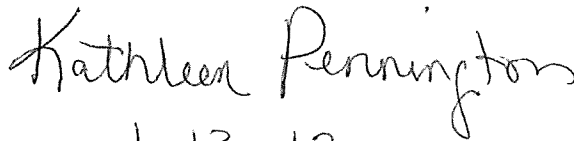
Having been duly sworn, the following is true to the best of my knowledge, information, and belief:

1. If called to the stand, I am competent to testify to the statements, and subject matter herein.
2. I can submit my curriculum vitae by next week
3. On Wednesday, January 11, 2012, I watched the motion picture *Drive*, at the request of attorney Martin H. Leaf.
4. The portrayal of the Jew in *Drive* was inhumane with a connotation of the devil. The Jews disregarded the value of humanity and worshipped money to the death of whoever got in their way. *Drive* had negative ethnic profiling of who a Jew is. A Jew was reduced to a despicable being, anti-Christ or devil. *Drive* as a skinhead was represented to be human and a hero in destroying the enemy, either Jews, or agents of Jews.
5. I noticed subliminal content, but only after having this content pointed out to me.
6. I believe that the bright light illuminating the skinhead Driver, was subliminal.
7. The crucifix formed by the design on the window, was also subliminal.
8. The music and lyrics being played when the skinhead Driver is stalking the Jew is subliminal.
9. When the skinhead Driver is approaching the Jew on the beach, a light behind him forms a halo, which I believe is subliminal.
10. Mr. Leaf asked me if I noticed anything subliminal on the billboard when the skinhead is stalking the Jew.

11. Mr. Leaf was not able to show me the image that was allegedly
subliminal, because it was not on the watermarked version of the DVD.
12. I believe that there was a subliminal image of horns on the skull of Izzy
when he was talking to Driver, when Driver was in the room with topless
women, many of them blond.
13. I believe that much, if not all of the content in the movie, including the
subliminal content, promoted hatred of Jews.
14. When using the term subliminal, I am referring to music, lyrics, or images
that are not consciously perceived, or understood when initially presented.

FURTHER DEPONENT SAYETH NOT.


Dr. Fran Parker, PhD *licensed psychologist*


1-13-12



KATHLEEN PENNINGTON
Notary Public, State of Michigan
County of Oakland
My Commission Expires May 04, 2013
Acting in the County of Oakland

EXHIBIT 4

STATE OF MICHIGAN
IN THE SIXTH JUDICIAL CIRCUIT

Sarah Deming – an individual

Plaintiff,

-v-

Case No. 11-122090-CZ
Hon. Daniel O'Brien

CH NOVI LLC, a Michigan Limited
Liability company d/b/a EMAGINE NOVI
and **FILMDISTRICT DISTRIBUTION, LLC**, A
California Limited Liability Company,

Joint and Several Defendants

MARTIN H. LEAF PLLC
Martin H. Leaf (P43202)
2055 Orchard Lake Road
Sylvan Lake, MI 483220
Tel: 248-687-9993
leafmartin@gmail.com
Attorneys for Plaintiff

KATTEN MUCHIN ROSENMAN LLP
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Jonathan Rotenberg (admitted pro hac vice)
575 Madison Avenue
Tel.: 212-940-8800
Alan.Friedman@kattenlaw.com
Jonathan.Rotenberg@kattenlaw.com

THOMPSON & KNIGHT LLP
James E. Stewart (P23254)
39533 Woodward Ave., Ste. 320
Bloomfield Hills, MI 48304
Tel.: 248-258-7900
James.Stewart@tklaw.com

AFFIDAVIT OF RABBI CHAIM MOSHE BERGSTEIN

Having been duly sworn, the following is true to the best of my knowledge, information, and belief:

1. If called to the stand, I am competent to testify to the statements, and subject matter herein.
2. I have been a Chasidic Jewish Lubavitch Rabbi for thirty four years, having been ordained in Brooklyn at the Lubavitch world headquarters, known as "770".
3. I studied Kosher slaughter as part of my training.
4. I have also acted as a Kosher slaughter supervisor, a Mashgiach.
5. On Monday, January 8, 2012, I watched the motion picture *Drive*, at the request of attorney Martin H. Leaf.
6. Prior to watching *Drive*, I watched the trailer.
7. The trailer was misleading. I expected action and car chases.
8. The movie *Drive*, instead, was insufferably boring.
9. The movie was obviously designed to promote hatred of Jews and invoked classical anti-Semitism.
10. The Jews were behind the scenes causing death and destruction for everyone, in order to get their money.
11. They even threatened the blonde, Aryan looking wife and child.
12. The Jews in *Drive* were lustful, money hungry, corrupting, and totally evil.
13. It was clear to me that when Bernie Rose murders Shannon, the murder is designed to represent Kosher slaughter, and is a direct attack on Judaism, as well as the Jewish people. Kosher slaughter requires a straight edge knife, and the blade is carefully washed and put into a box, all conspicuously done in the film.

14. The fact that Bernie Rose tells the crippled Shannon that it is painless, over, and done, while Shannon is obviously conscious, horrified, and aware, was the film's statement that Jews are sadistic, which they are not, and Judaism is a sadistic religion, which it is not.
15. I was shocked and horrified that an American film would dare have such a hateful agenda.
16. The character Standard was chosen because he looks like a Palestinian, to further the film's message that Jews bring death and destruction to the Palestinians.
17. I was so outraged by this film, that I made two videos explaining it.
18. Most of my ^{father's} family was murdered by the Nazis because they were born Jewish.

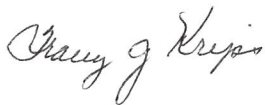
FURTHER DEPONENT SAYETH NOT.



Rabbi Chaim Moshe Bergstein

STATE OF MICHIGAN
COUNTY OF OAKLAND

SIGNED AND SWORN THIS THE 13TH day OF JANUARY, 2012.



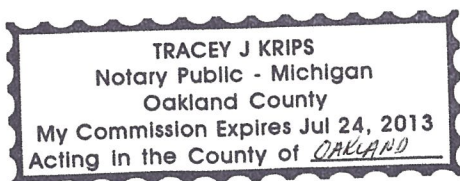


EXHIBIT 5

STATE OF MICHIGAN
IN THE SIXTH JUDICIAL CIRCUIT

Sarah Deming – an individual

Plaintiff,

-v-

Case No. 11-122090-CZ
Hon. Daniel O'Brien

CH NOVI LLC, a Michigan Limited
Liability Company d/b/a EMAGINE NOVI
and **FILMDISTRICT DISTRIBUTION, LLC**, A
New York Limited Liability Company,

Joint and Several Defendants

MARTIN H. LEAF PLLC
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Sylvan Lake, MI 48320

Tel: 248-687-9993
leafmartin@gmail.com
Attorneys for Plaintiff

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THOMPSON & KNIGHT LLP
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Tel.: 248-258-7900
James.Stewart@tklaw.com

AFFIDAVIT OF DAVID TURNER LCSW

Having been duly sworn, the following is true to the best of my knowledge, information, and belief:

1. If called to the stand, I am competent to testify to the statements, and subject matter herein.
2. I have attached my curriculum vitae.
3. On Saturday, March 10, 2012, I watched the motion picture *Drive*, at the request of attorney Martin H. Leaf.
4. *Drive* contains subtle, yet consistent anti-Semitic themes.
5. These anti-Semitic themes are manifest in the overall plot and story, in addition to the details of the depiction of Bernie Rose and Nino.
6. The anti-Semitic themes include the following: Jews are clannish, money hungry, scheming, controlling behind the scenes, corrupt and promote evil, selfish, repugnant etc...
7. I also noticed religious symbolism associated with the Church, and in particular, associated with the Church's accusations against Jews that resulted in the persecution, including murder, of Jews throughout History.
8. I read about many of the above characteristics of *Drive*, primarily through correspondence with Martin H. Leaf, prior to viewing the film. Although all of the characteristics and statements included in this Affidavit regarding *Drive*, I have observed in the film, I do not believe that I would have consciously noticed many of them had I not been aware of the details of

the anti-Semitic content in advance, especially the "JC" on Rose's shirt at the end of the movie, and even the Jewish star on the garage door.

9. I write extensively about historic persecution of Jews in my column for the largest English language newspaper in Israel – The Jerusalem Post, which is also on the internet, and followed in America and Europe. The Jerusalem Post includes a Christian Edition. Here is a link to my most recent column, detailing aspects of anti-Semitism in America.

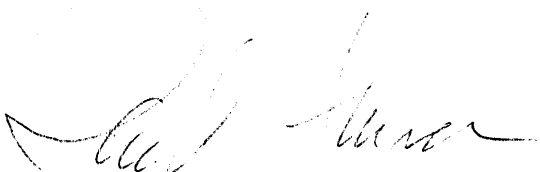
<http://blogs.jpost.com/content/united-states-and-holocaust-1-background-passivity>

10. *Drive* contains themes, images, situations, and stereotypes that have been used historically to promote and justify the murder of Jews. I have written, based on research done by credible historians, that one of every two Jews has been murdered in the past millennium for being Jewish.

11. I am not aware of a mainstream movie distributed to the American public, with a consistent and apparently deliberate message of anti-Semitism, although this is common in other parts of the world today.

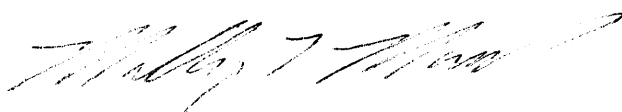
12. I also watched the trailer for *Drive* and found that it was misleading in the following ways:

FURTHER DEPONENT SAYETH NOT.



David Turner LCSW

March 14, 2012
Henrico, VA



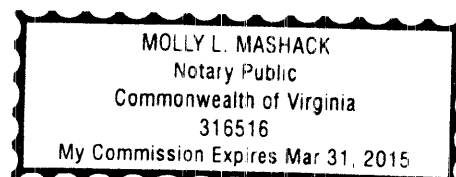


EXHIBIT 6

Randall Bytwerk

Jan 4 (13
days ago)

to me

Hi Martin,

After having seen *Drive*, I agree that Nino and Bernie Rose clearly reflect quite a range of anti-Semitic stereotypes.

Randall Bytwerk
Calvin College

Randall Bytwerk

Jan
2

to me

Depends on how one defines around....

I'm in Tasmania for the next month.

Randall

EXHIBIT 7

<http://vnnforum.com/showthread.php?t=134447>

Just a nice, odd little flick but as the second half unspooled, to my amazement, kike villains!

The real deal, made my ears go up. Albert Brooks is probably the jewiest of all jews ever in a movie. And when he takes a fork and... Wait, you gotta see that. He's utter trash and maybe not even acting.

24

Forget the blood in this sequence, it's just jews being jewish. The face-off is climactic, but all muted; still I liked the White Man taking out the jewtrash with style.

And his sense of honor is first-rate, saving the White Girl, but not taking the place of her beaner husband. (You'll just have to take my word.) No idea how this came off on the big screen. Sure worked for me. Yes, the movie is slow and takes a long time getting to it. Older guys like me really aren't part of this movie's demograpic, but fu.. it.

The kike showdown was just what I needed, and maybe I'm not alone. Big, white thumb all the way UP!

"When I get re-elected I'm going to fuck the Jews" -- Jimmy Carter, 1980.

<http://www.stormfront.org/forum/t864990/> #6

Re: Pro-White Movies?

Drive !

A post on the VNN goes into detail of why it is most certainly a pro white movie and one of the rare movies to have Jewish villains.

a must see

<http://www.stormfront.org/forum/t845093/> #3

I dont know how the conclusions could be so different from mine from another WN, this film is very much pro WN from my point of view.

Ok, we are introduced to the cultural wasteland in Los Angeles. Our protagonist is rootless, lonely and lost in this world but has found a father figure in a good white mechanic who is down to earth even if he also got to do dirty work for powerful people to survive.

Our heroine is lost aswell, in a rented apartment with a boy she had with a man who is in prison. His ethnicity is probably arab or is it latino?

Anyway, I know many here cant forgive relationship by women with anyone nonwhite, but we learn this shy girl was 17 when this brute foreigner made his move on her and made her pregnant. Probably she was too young and lost in the world of racemixing propaganda to understand the error she was committing. Back to our hero, he has typical oldschool northern european look and character. Straight, quiet and not extravagant and loyal to his boss. He meets this girl with the boy and finds something worth living for in the spiritual wasteland that is life in Los Angeles.

Soon we get to know the villains, two jews who are connected to dirty business in Los Angeles. One of them is directly from the movie industry and has produced movies, the other one owns a pizzeria as a cover up for his real job controlling criminal activity in the area. We never get to know all there is to these guys but we get the feeling that there is a power structure that is too complex and big for our white protagononists to understand and they are pawns in the game for these jews who use them to do some dirty job for them. These jews live for

25
blingbling and money, they fit all the negative ideas we have about the jewish character, I would think you wont find two jewish villains who act jewish in almost any other film.

Anyway, I wont cover the whole story but the husband gets out from prison and is revealed to be a bad character, a coward and just a miserable human beeing who needs help from our white hero to do his dirty job.

I have no idea why anyone WN would be so upset about this film if it is not that they think films would keep quiet about the reality that white girls have babies by men of other races?

You want to not show the reality? If this film showed her having a baby with a dark stranger and they lived happy ever after, that would be very insulting to me. But how about showing how her decision was a bad one when she got together with this criminal as a young girl, that is a good description of reality and a warning!

This is overall a great film with a great white hero going on a killing spree against a corrupt multicultural world obviously lead by jews. In fact almost no film is better than this one from a WN point of view, they already sued the film for antisemitism so it cant be all bad:

[JShlomo Shekelstien](#) 3 weeks ago

Jews are always hypocrites when it comes to them and the goyim in any related issue. It is fine to bash Whites,Blacks and etc, but when a movie or whatever have a Jew as a villain then the filthy nose-niggers get all ape shit. It's one standard for the Kikes and another for the goyim.

[faceless dutchebag](#)

I used to love Jews, after this you have officially made me an antisemite. whiny bitch crying about a boogeyman that isn't there. train to Auschwitz!!!

<http://melgibstein.wordpress.com/2012/02/03/drive/> Response 2

I saw " Drive " a while ago , and thought it was utterly boring , but , I noticed that the jews were portrayed AS jews , and a nasty bunch at that . Gosling got his big break in the hilarious joo-joo muck " The Believer " , of course . Our "leading men " are getting awfully scrawny , arent they ? (Adrien " The Schnozz " Brody)

I've seen very few movie portrayals of "The Kike Gangster "

EXHIBIT 8



EXHIBIT 9



EXHIBIT 10

Circuit Court Transcript – Judge O'Brien

THE COURT: Benefit of the argument for this summary disposition, how do you respond to the argument that the First Amendment is -- and let me back up. That the -- forget overt or anything else -- I'll tell you, quite frankly, I see the J.C. and I -- I see it. I'm not saying that it means -- I'm not saying that there was intent or I'm -- I don't purport to know what's going on in the mind of anybody else, but I see that uplifted clothing and the outline. Simple question, counsel, that the viewer -- if it does qualify as a subliminal message of anti-Semitism, how does it survive -- counsel says it survives First Amendment scrutiny because the viewer is not free to reject the leaflet, so to speak. What -- what say you about that argument?

MR. FRIEDMAN: I say a few things, Your Honor.

First off, it's there and it can be seen, so I don't think it meets the definition of subliminal. Second off

THE COURT: I -- I will say I'm -- I'm -- it's hard because I'm the Court and I have to be serving my role as a court and a -- and a human secondly, but I can't help -- I'm both right now and as a human being when I first saw it, I didn't see the J.C., and now I do.

The Court finds again, giving Plaintiff the benefit of any doubt, the Court will recognize the movie --the movie as overtly and **subliminally** anti-Semitic and/or **promoting** the same. And the Court will, for the benefit of Plaintiff, characterize that characteristic as material. Hence, the first clause of subsection (s) is satisfied, to-wit that the Defendants failed to reveal a material fact that the movie was anti-Semitic.[emphasis added]

Again, a trailer which advertises a movie that is about X, but which movie is about both X and Y, is not deceptive. It might not be complete, but the Court finds that it is not deceptive, at least under the facts as Plaintiff pleads here.

First, if there is overt anti-Semitism, it is not as clear as it could be. The words are not used. There --there are some bad words or words that would relate to anti-Semitism; however, the clearer the anti-Semitism, the more the omitting trailer could be deceptive or misleading. On that note, the less obvious the anti-Semitism, i.e., subliminal messages, the less could an omitting trailer qualify as misleading or deceptive.

Kind of a not a good example, but a movie trailer, for example, is published to the people, and it is the same exact thing as the whole entire movie itself, just the trailer is the movie. The only difference between the trailer and the movie is that the movie has a red hue, whereas the trailer has no such hue. Rhetorically asking the Court --the Court asks is that misleading, is it deceptive? The Court finds no.

EXHIBIT 11-1



EXHIBIT 11-2

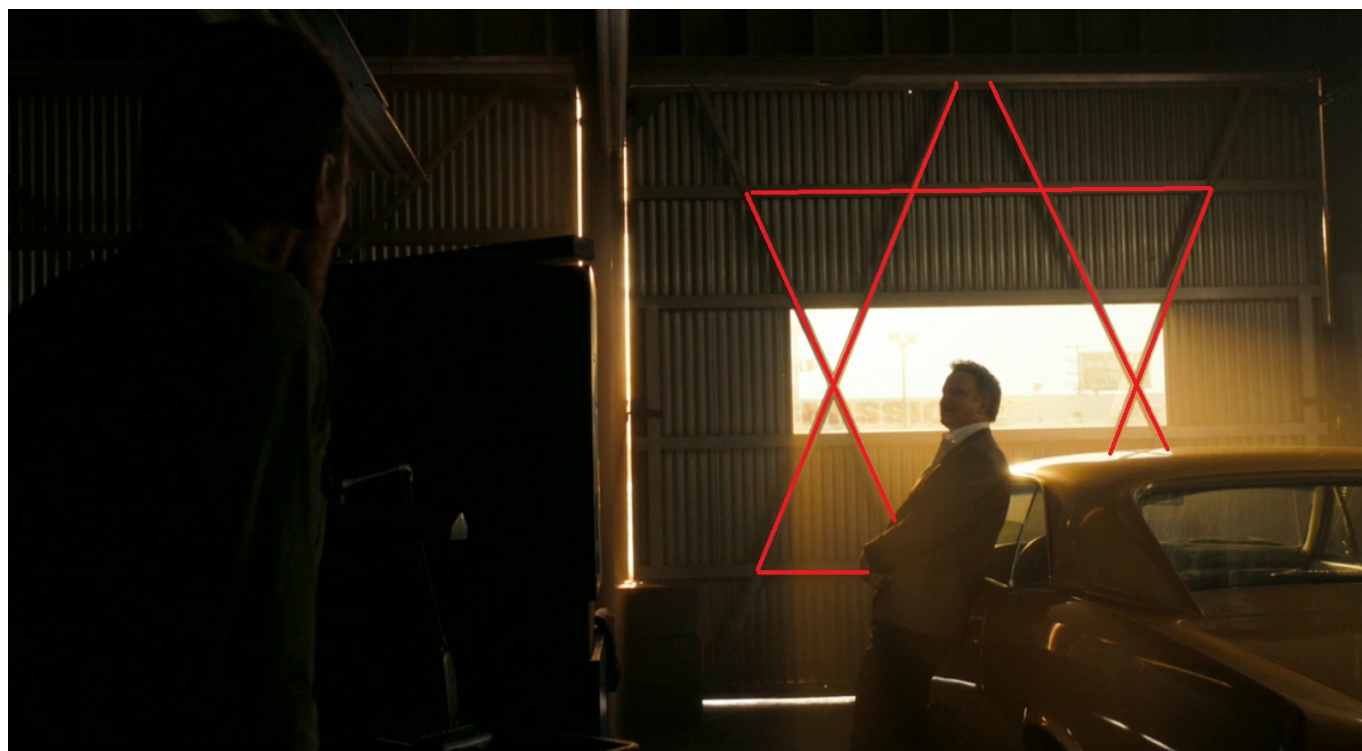


EXHIBIT 12-1



EXHIBIT 12-2



EXHIBIT 13



EXHIBIT 14-1

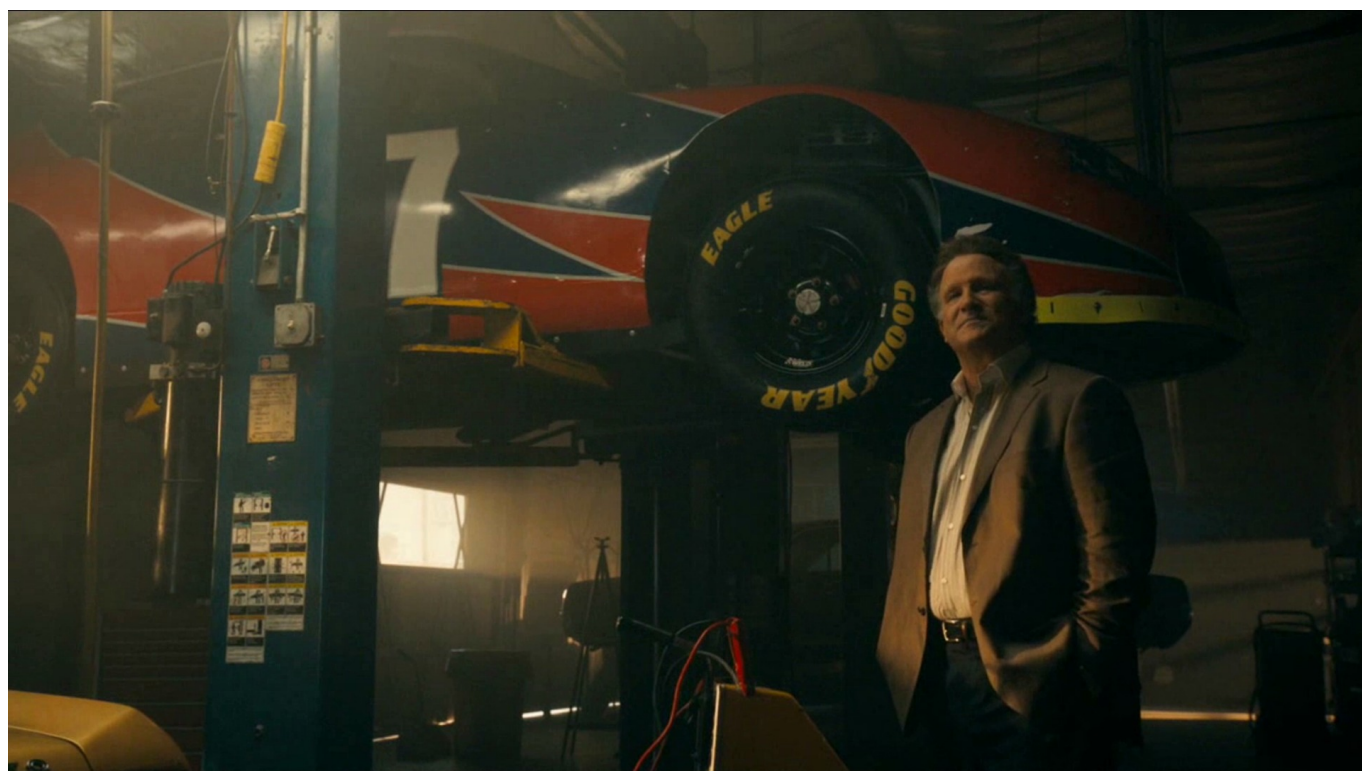


EXHIBIT 14-2

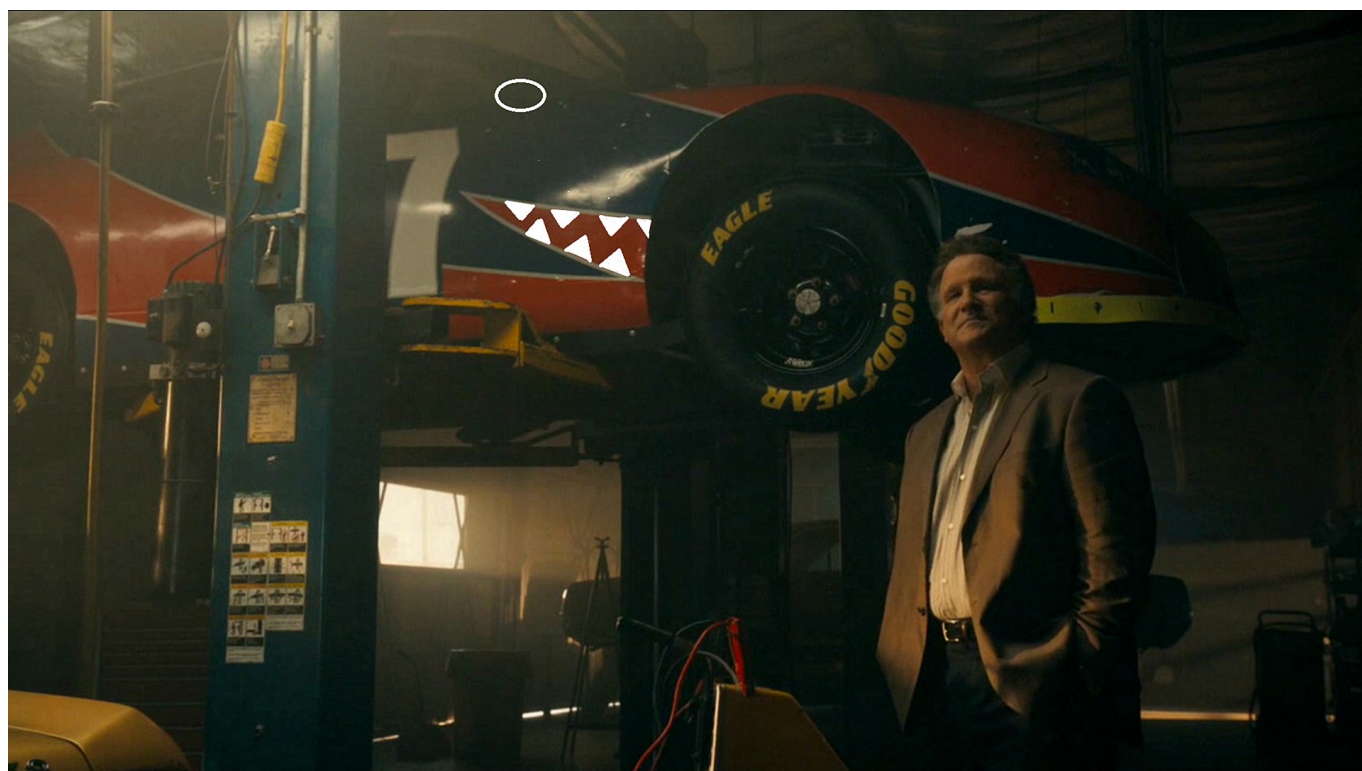


EXHIBIT 15

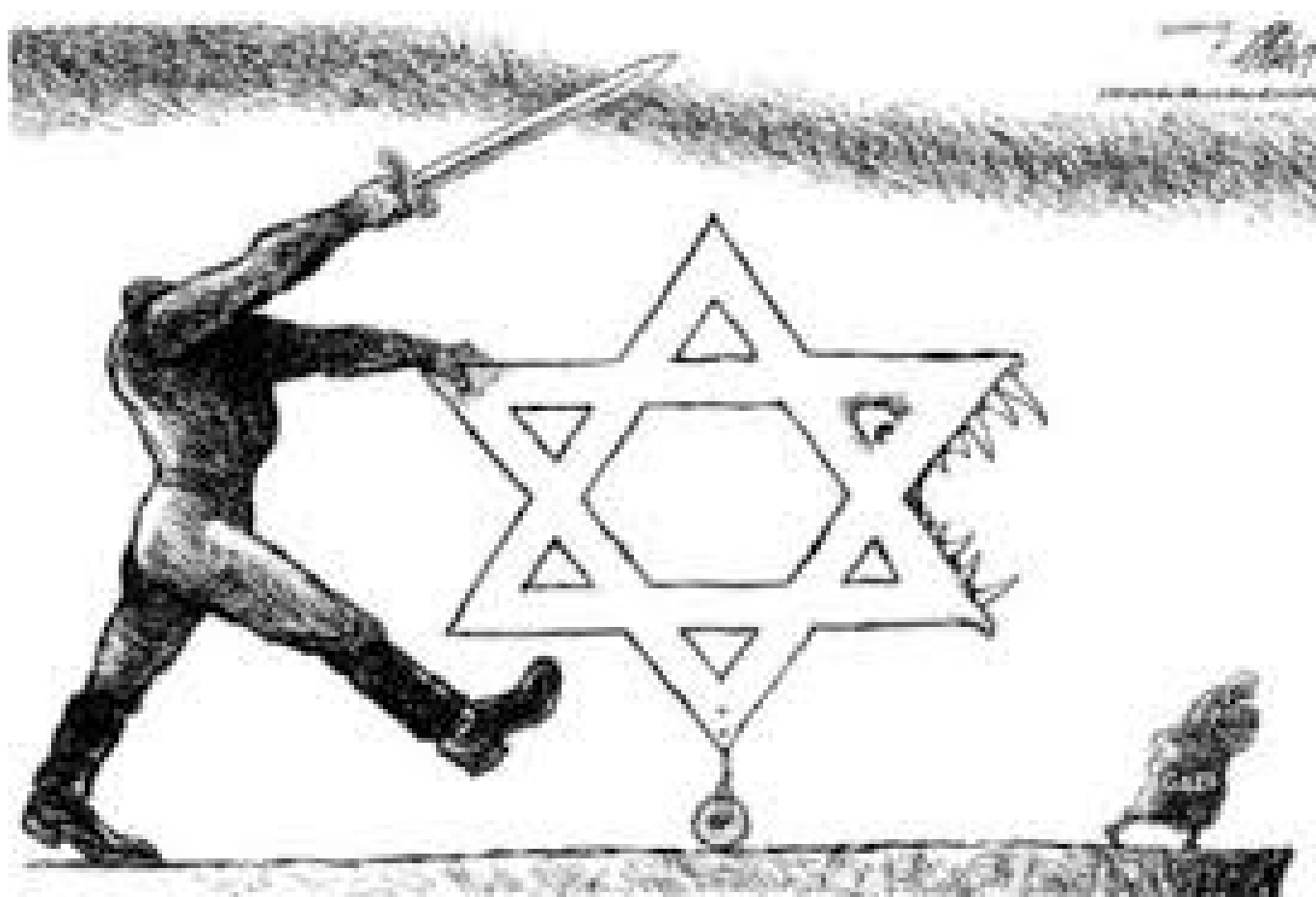


EXHIBIT 16

<https://en.wikipedia.org/wiki/Jyllands-Posten>

On 15 November 1938, the editorial commented on the [Kristallnacht](#) with the words: *"When one has studied the Jewish question in Europe for decades, the animosity towards the Jews is to a certain extent understandable, even if we look past the racial theories, that mean so much in the national socialist world view [...] We know, that tens of thousands of Jews condemn the Jewish business sharks, the Jewish pornography speculators and the Jewish terrorists. But still, it can not be denied, that the experiences which the Germans—as many other continental peoples—have had with regards to the Jews, form a certain basis for their persecution. One must give Germany, that they have a right to dispose of their Jews."*^[9]

9. [Når Jyllands-Posten er i ekstremismens vold... - \(Den Kolde Krig / Racisme\) - Trykt i Information 19 April 1990](#)

EXHIBIT 17



EXHIBIT 18



EXHIBIT 19



EXHIBIT 20



EXHIBIT 21

Denmark bans kosher and halal slaughter as minister says ‘animal rights come before religion’

New law, denounced as ‘anti-Semitism’ by Jewish leaders, comes after country controversially slaughtered a giraffe in public and fed him to lions

Adam Withnall | @adamwithnall | Tuesday 18 February 2014

   679K shares



EXHIBIT 22-1



EXHIBIT 22-2



EXHIBIT 23



EXHIBIT 24



EXHIBIT 25



EXHIBIT 26



EXHIBIT 27



EXHIBIT 28

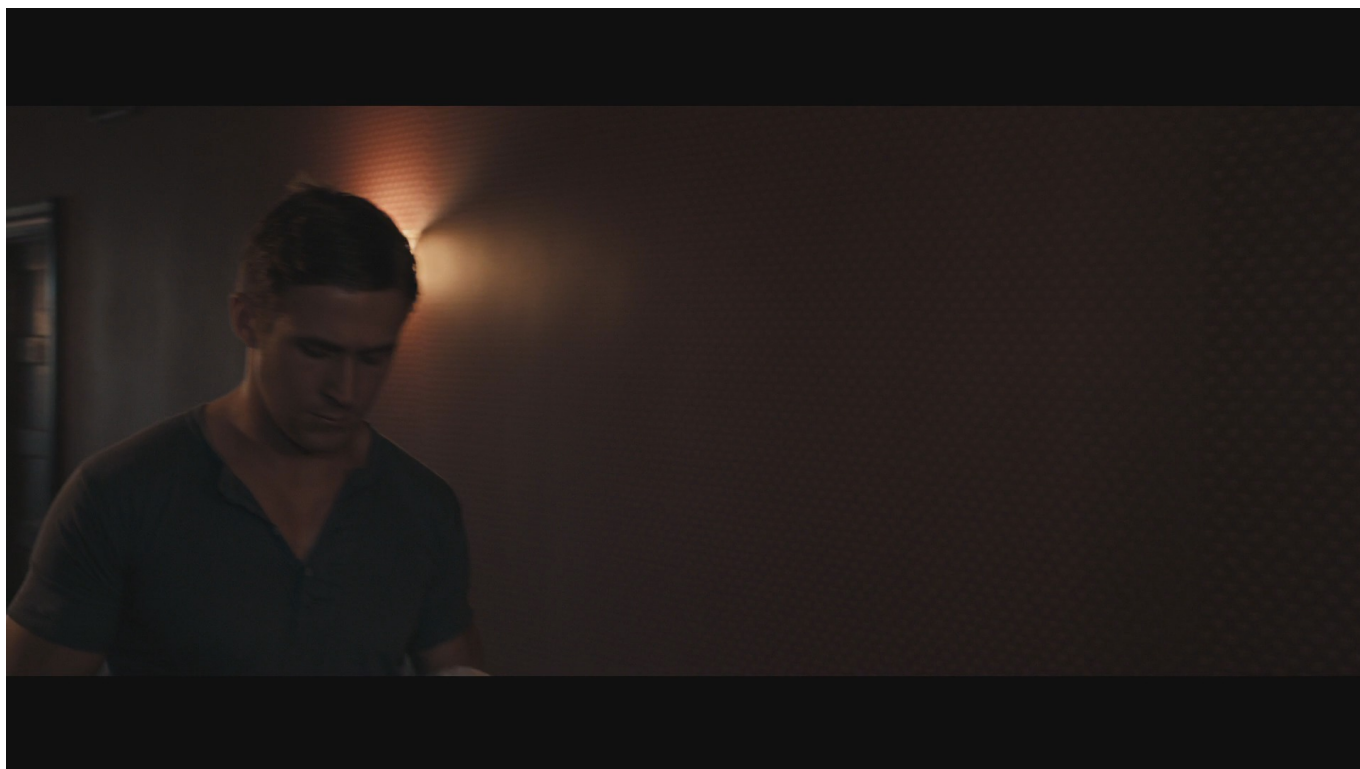


EXHIBIT 29

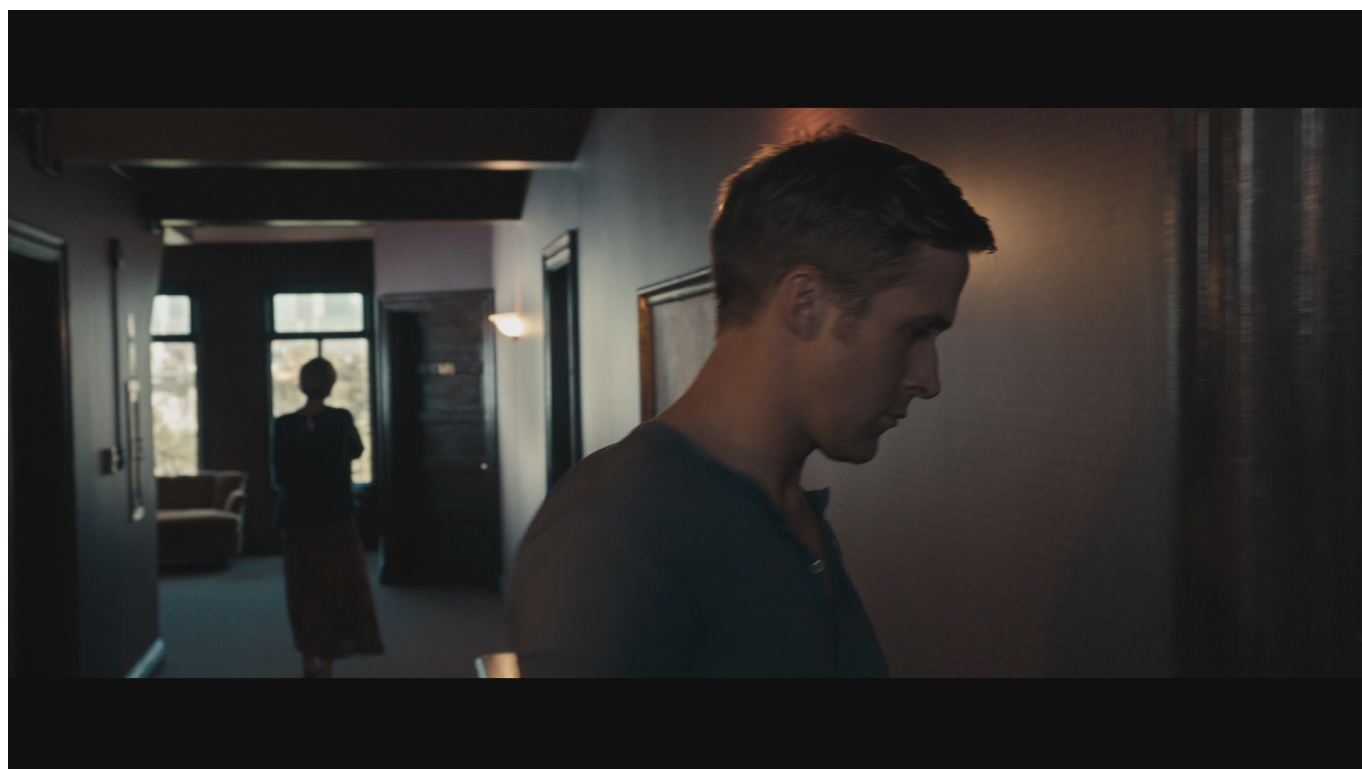


EXHIBIT 30



EXHIBIT 31



EXHIBIT 32

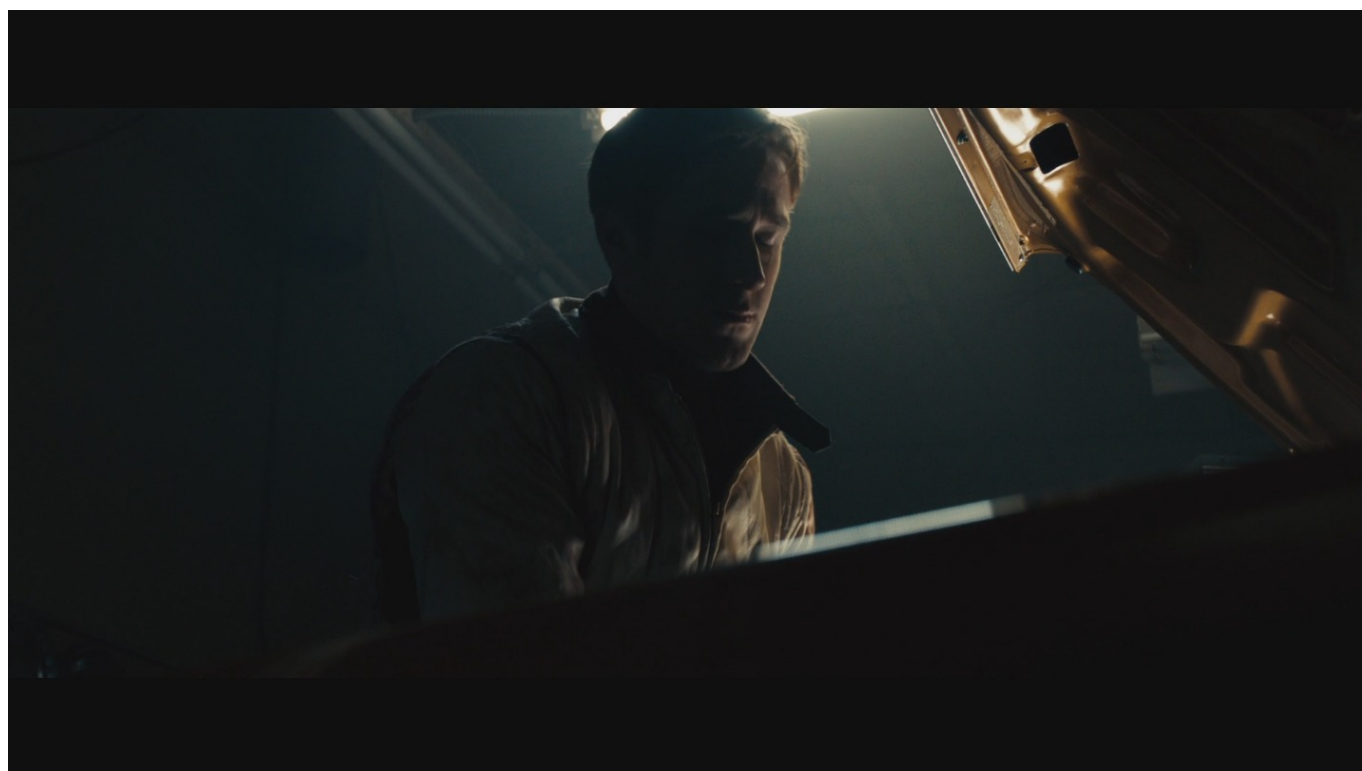


EXHIBIT 33



EXHIBIT 34



EXHIBIT 35-1



EXHIBIT 35-2



EXHIBIT 36



EXHIBIT 36-2

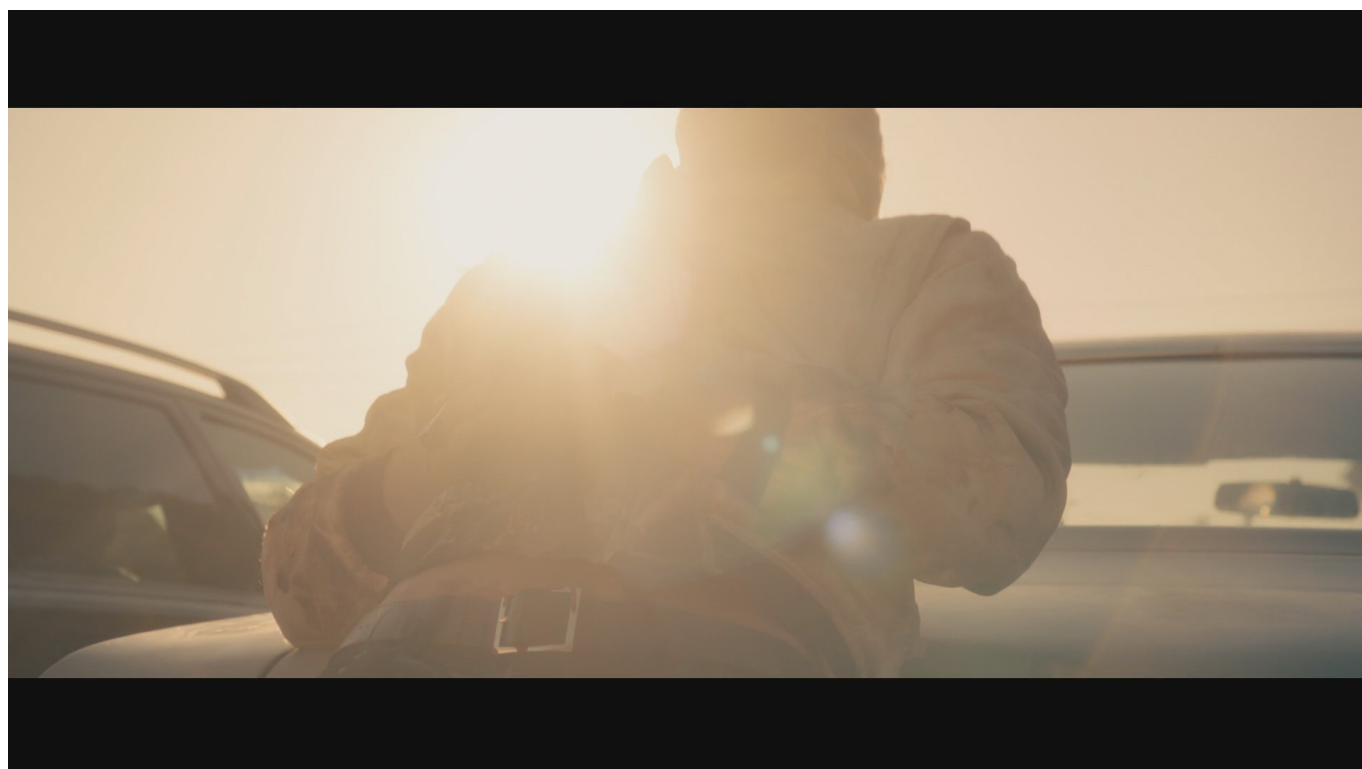


EXHIBIT 36-3



EXHIBIT 36-4

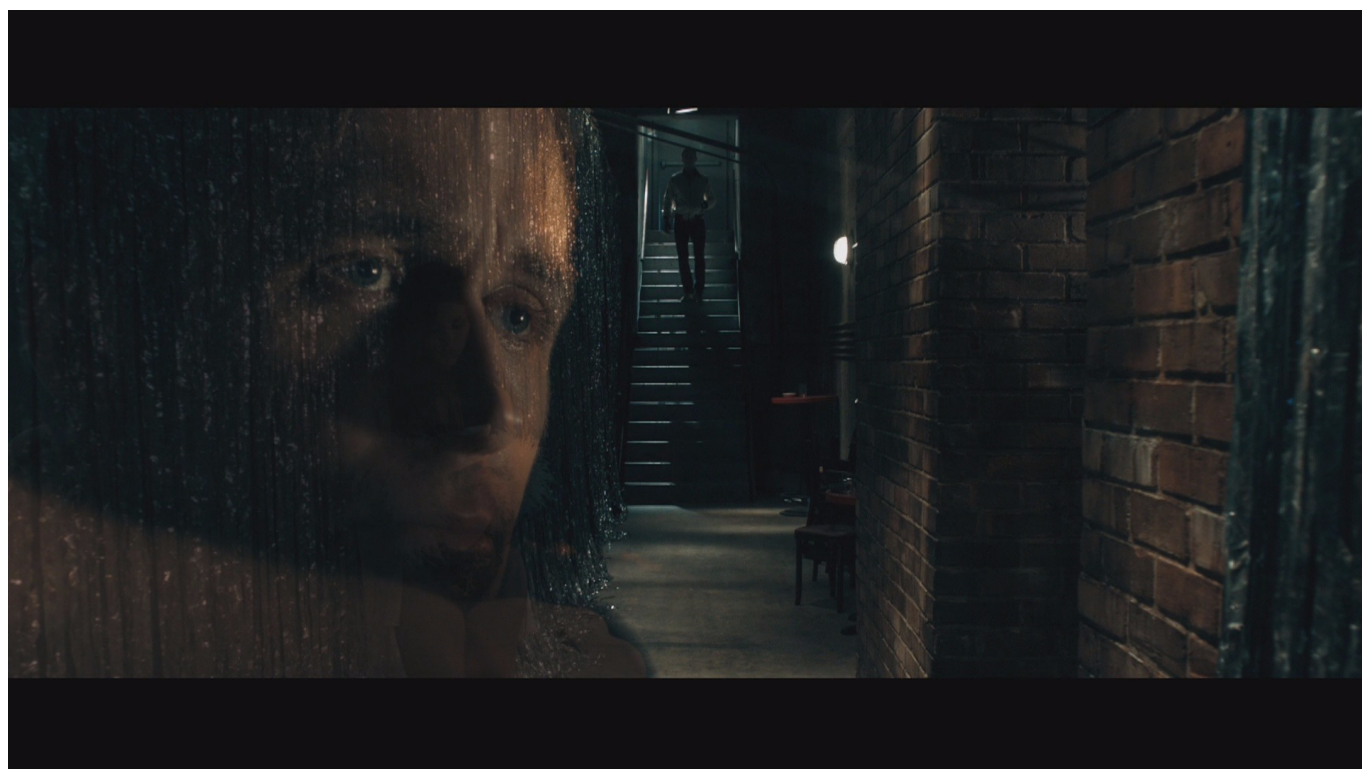


EXHIBIT 37



EXHIBIT 38



EXHIBIT 39



EXHIBIT 40



EXHIBIT 41



EXHIBIT 42



EXHIBIT 43



EXHIBIT 44



EXHIBIT 45

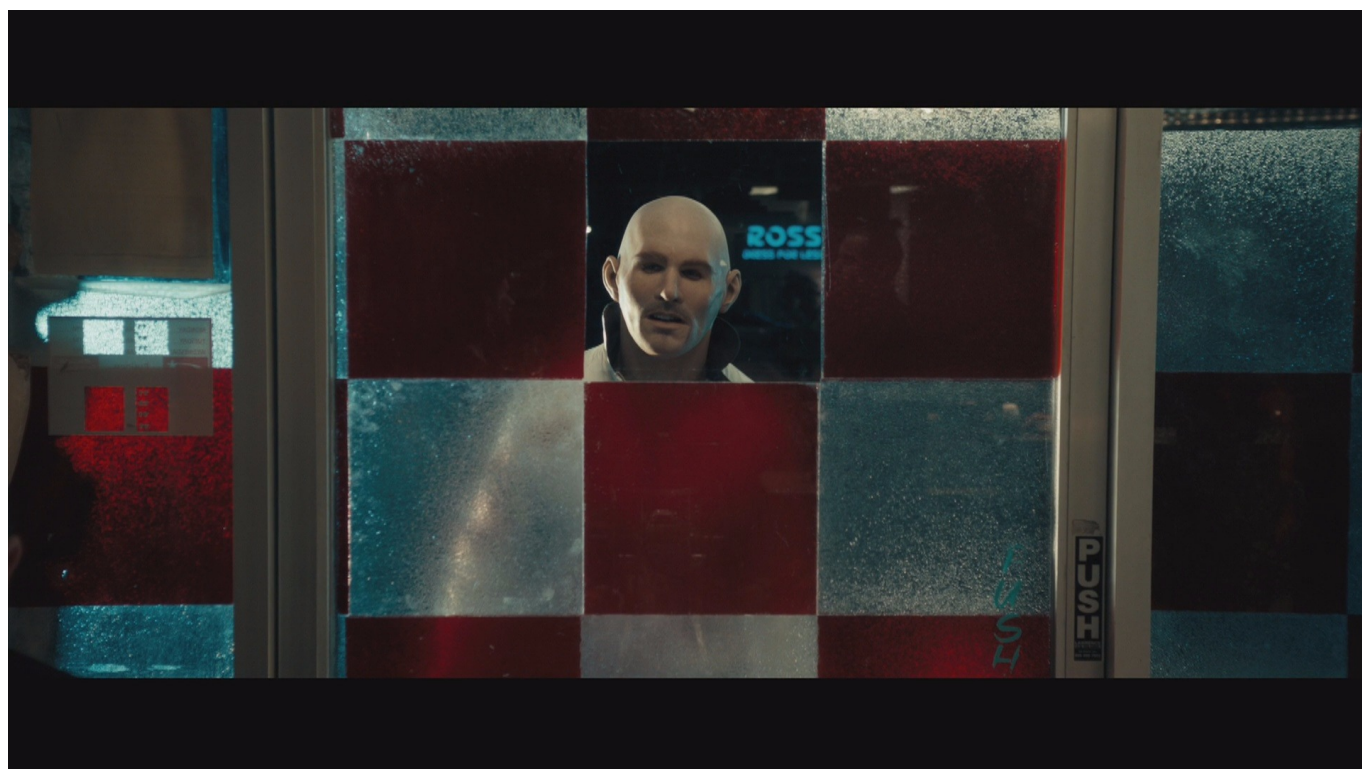


EXHIBIT 46



EXHIBIT 47



EXHIBIT 48



EXHIBIT 49



EXHIBIT 50



EXHIBIT 51



EXHIBIT 52



EXHIBIT 52-1



EXHIBIT 53



EXHIBIT 54

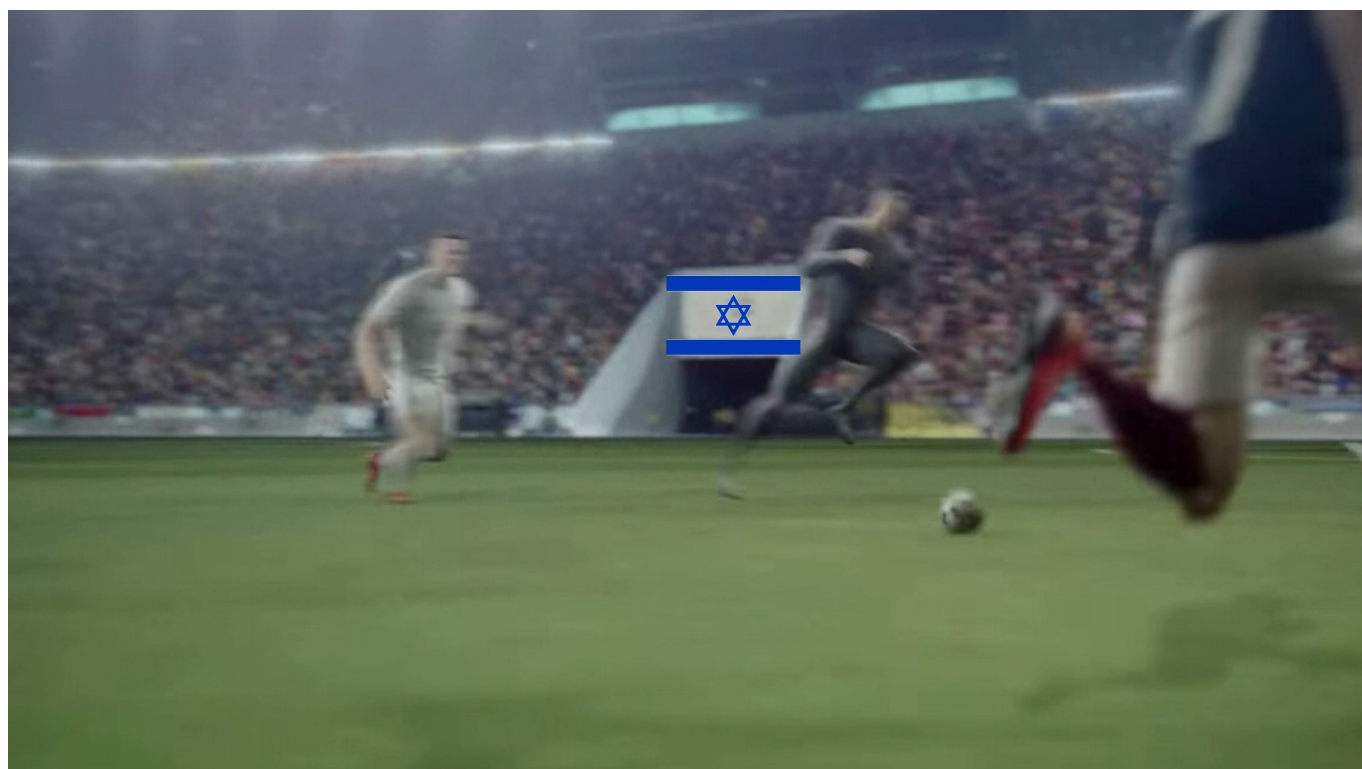


EXHIBIT 55



EXHIBIT 56



EXHIBIT 57



EXHIBIT 58



EXHIBIT 59



EXHIBIT 60



EXHIBIT 61



EXHIBIT 62



EXHIBIT 63



EXHIBIT 64

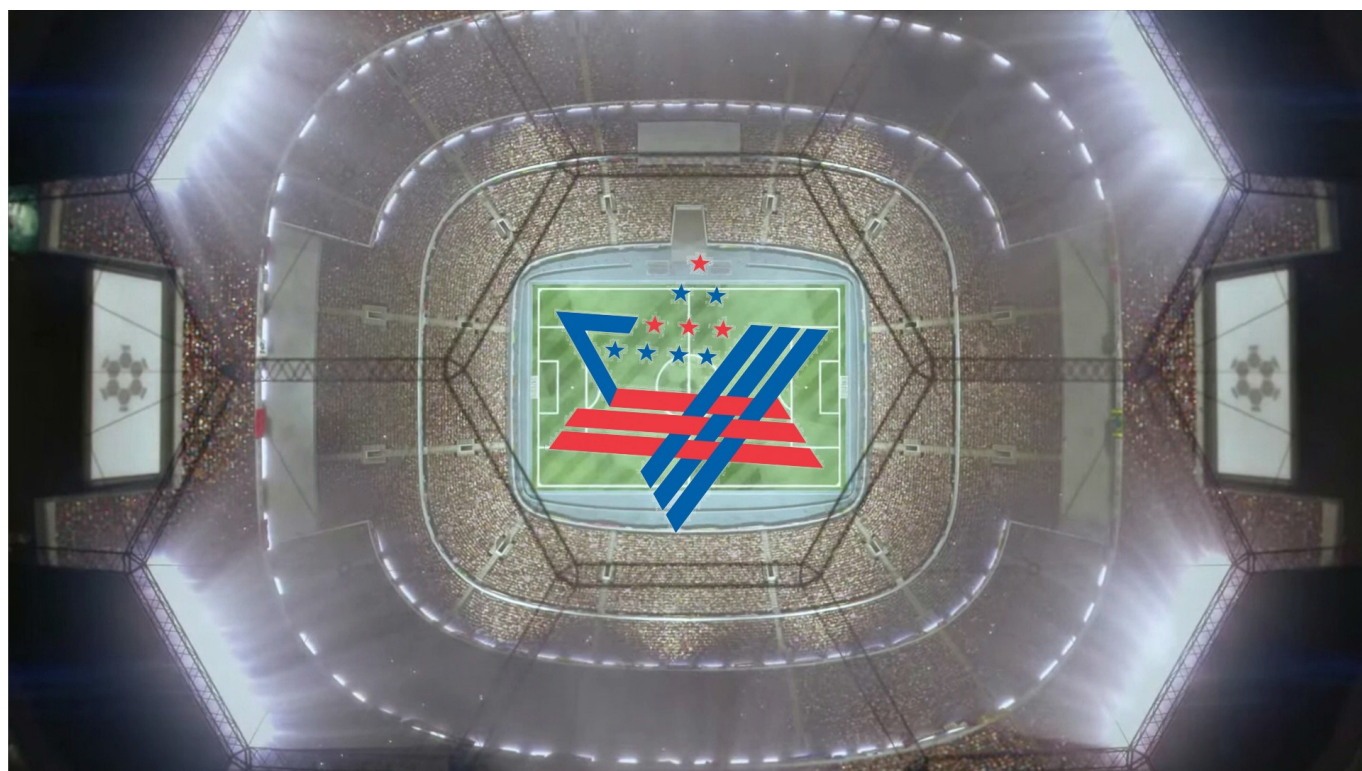


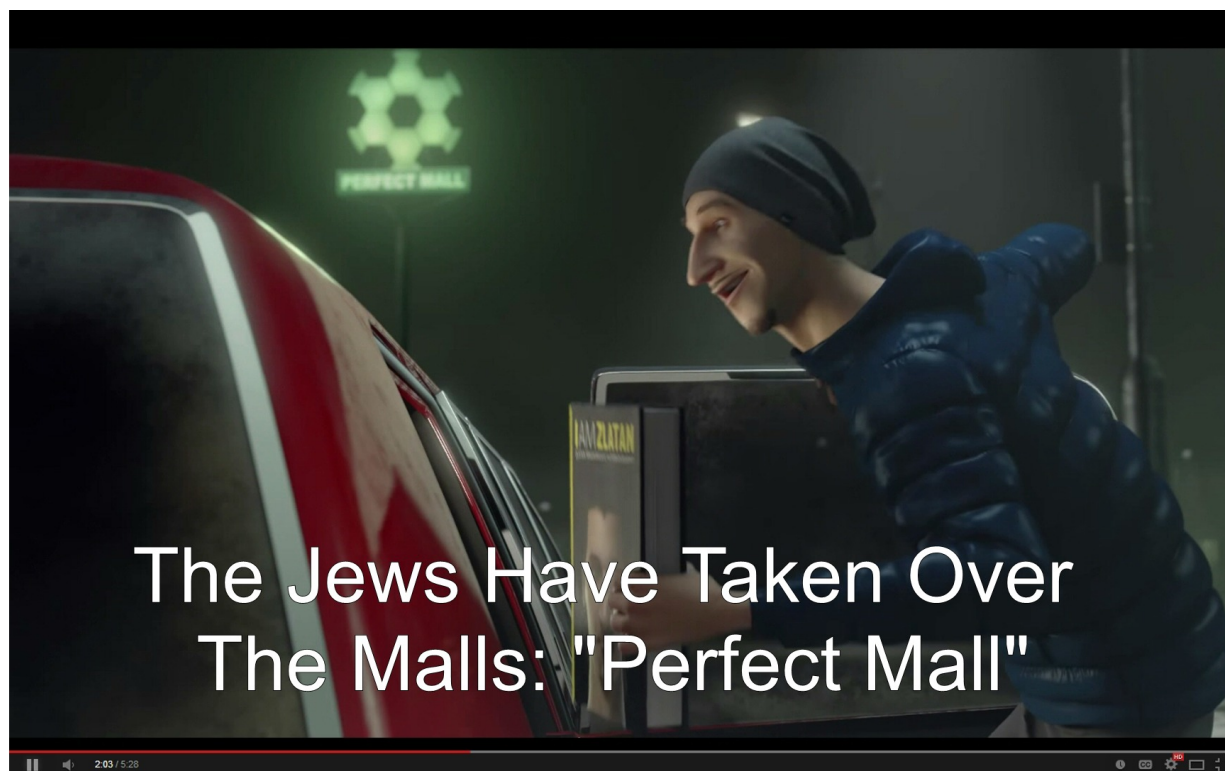
EXHIBIT 65



EXHIBIT 66



EXHIBIT 67



The Jews Have Taken Over
The Malls: "Perfect Mall"

EXHIBIT 68



The Jews Won't Let You Get
A Decent Haircut

EXHIBIT 69



EXHIBIT 70



EXHIBIT 71



EXHIBIT 72



EXHIBIT 73



EXHIBIT 74



EXHIBIT 75



EXHIBIT 76

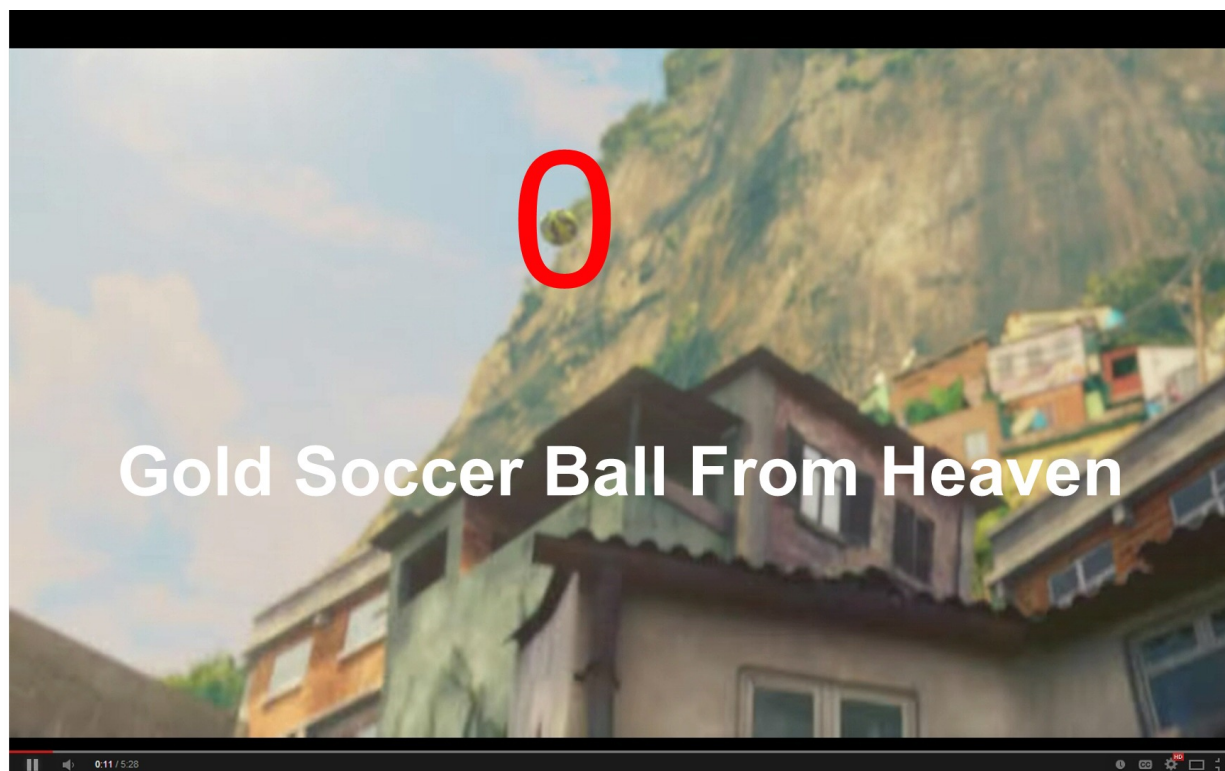


EXHIBIT 77



EXHIBIT 78



EXHIBIT 79



EXHIBIT 80



EXHIBIT 81

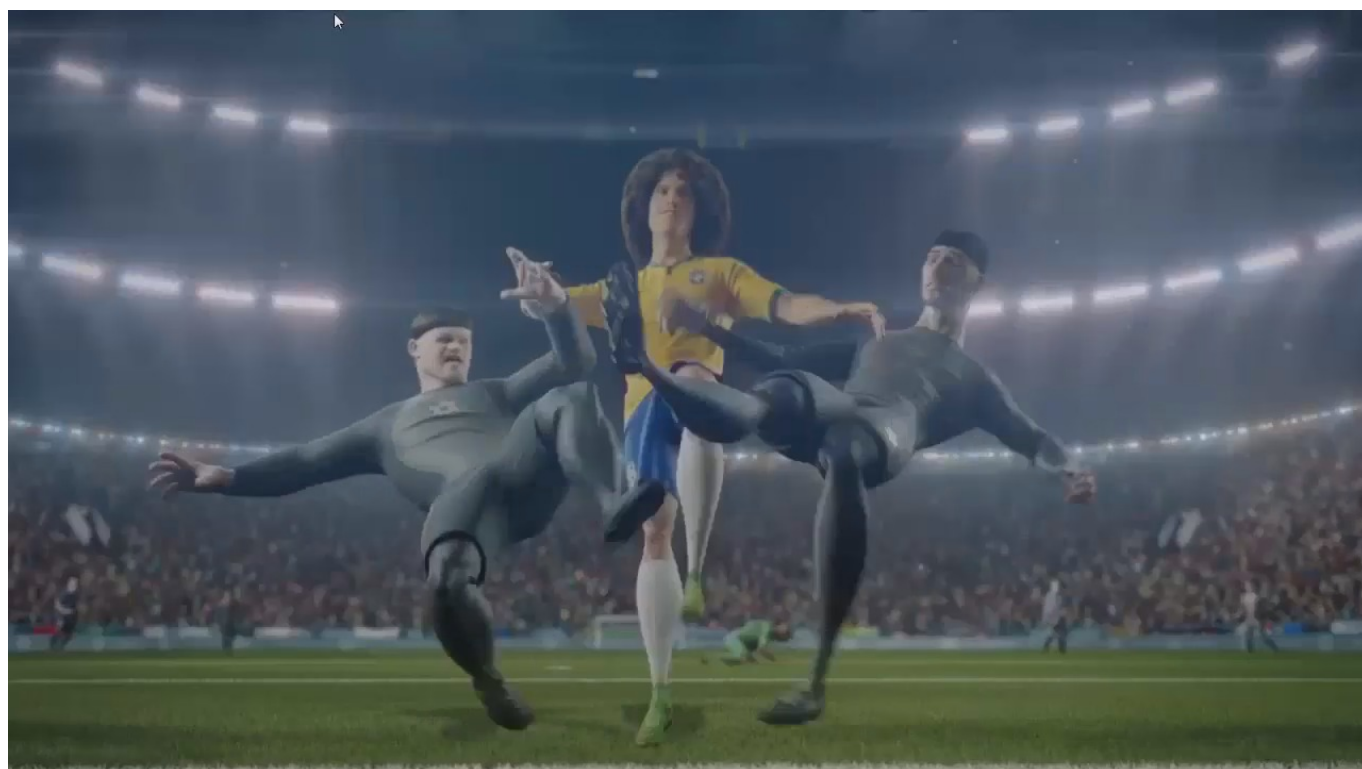


EXHIBIT 81-2



EXHIBIT 82



EXHIBIT 83



EXHIBIT 84



EXHIBIT 85

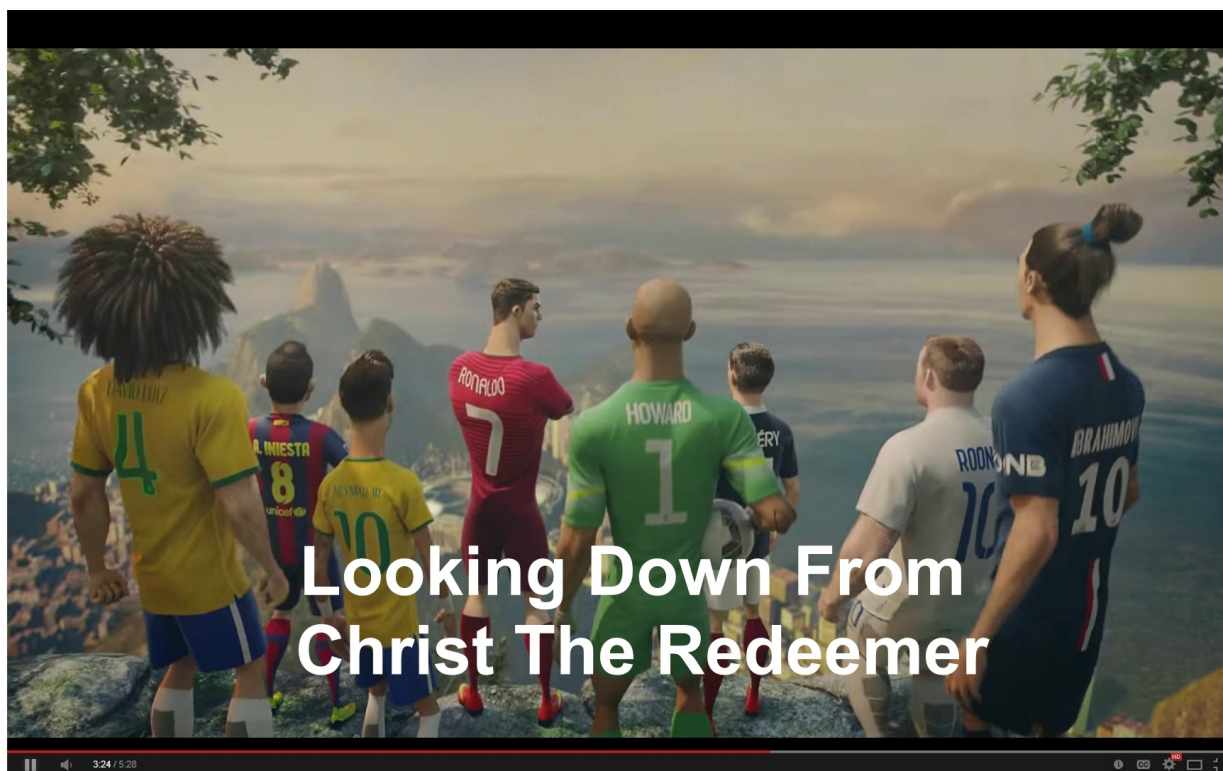


EXHIBIT 86



EXHIBIT 87



EXHIBIT 88



EXHIBIT 89

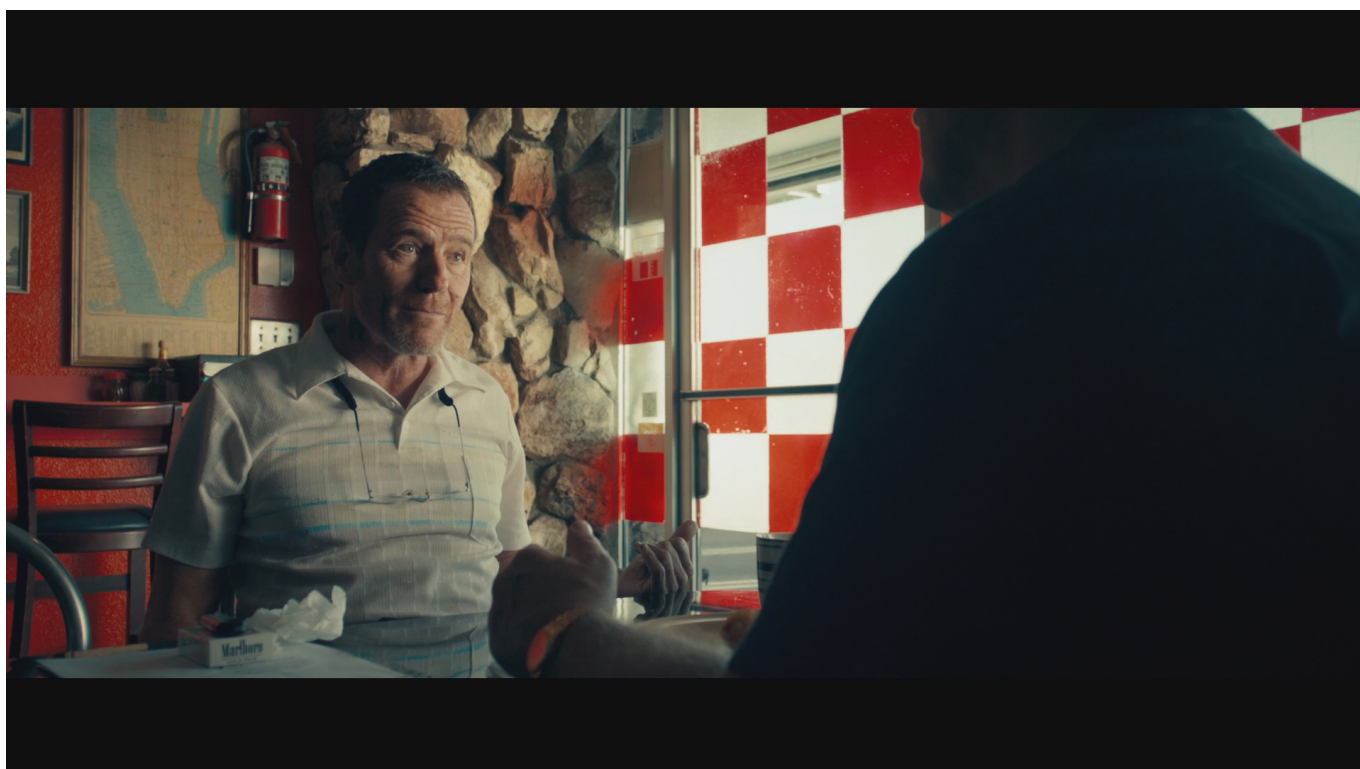


EXHIBIT 90



EXHIBIT 91

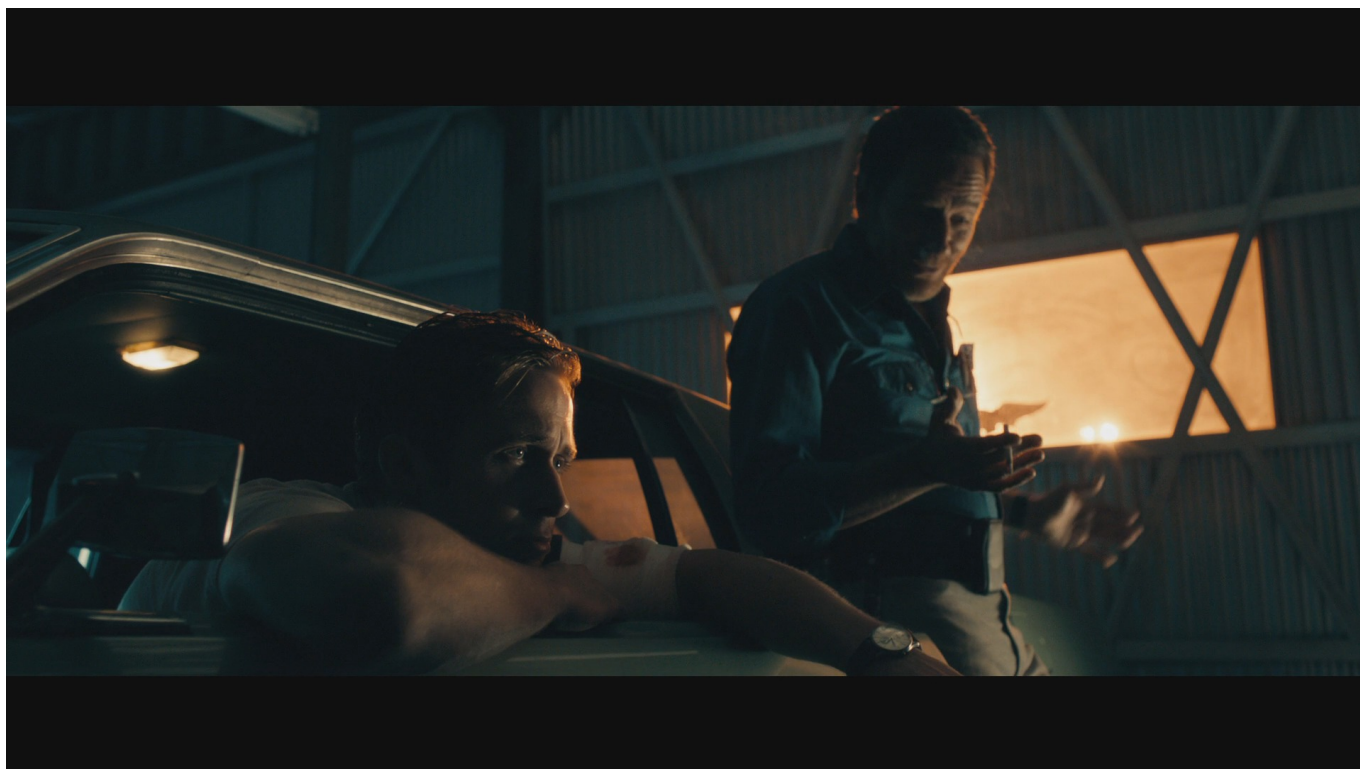


EXHIBIT 92



EXHIBIT 93



EXHIBIT 94-1



EXHIBIT 94-2

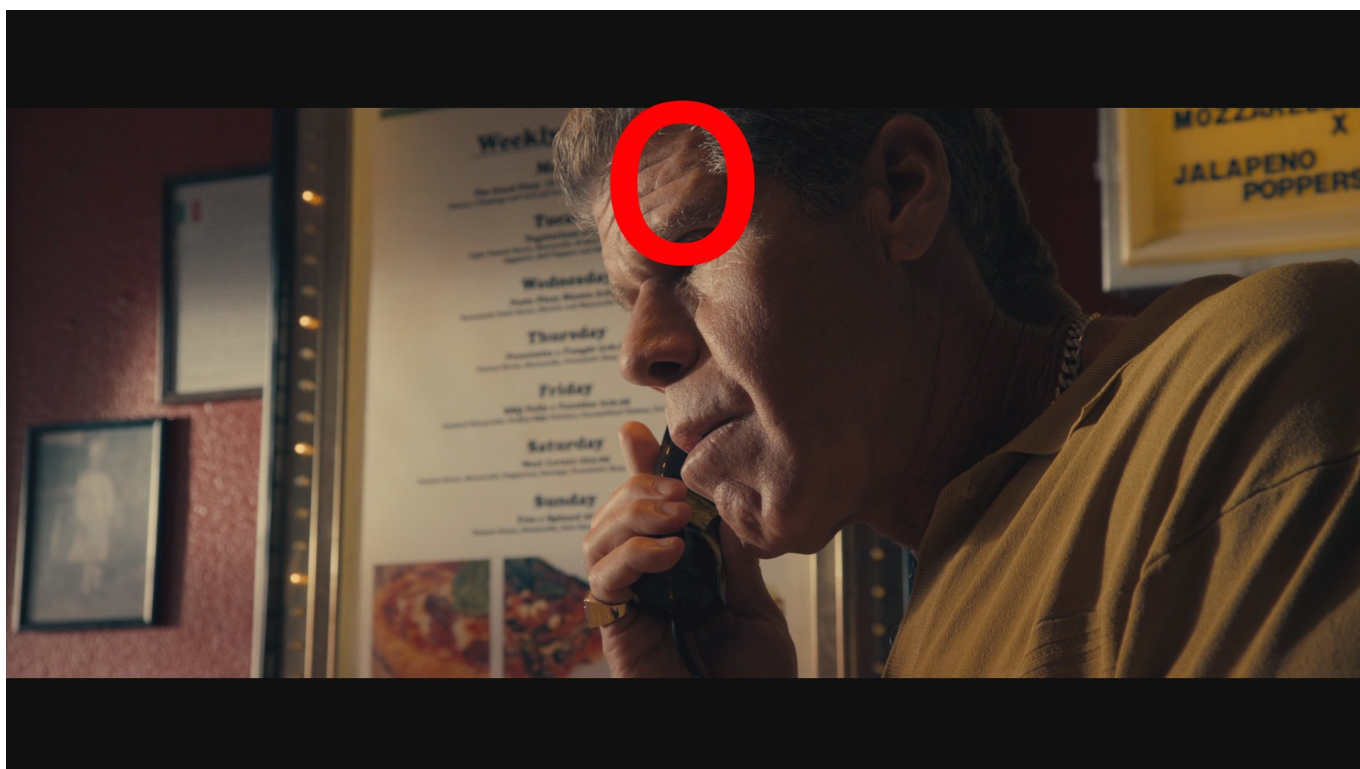


EXHIBIT 94-3





EXHIBIT 94-5



EXHIBIT B
PRAXIS V COKE

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Counsel for Plaintiff The Praxis Project

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

THE PRAXIS PROJECT, a non-profit
corporation,

Plaintiff,

v.

THE COCA-COLA COMPANY and
AMERICAN BEVERAGE ASSOCIATION,

Defendants.

Case No. 3:17-cv-00016-JSC

**AMENDED COMPLAINT FOR
DECLARATORY AND INJUNCTIVE
RELIEF**

DEMAND FOR JURY TRIAL

Plaintiff The Praxis Project (“Praxis” or “Plaintiff”) brings this action against The Coca-Cola Company (“Coca-Cola”) and the American Beverage Association (“ABA”) (collectively, “Defendants”). Plaintiff’s allegations against Defendants are based on information and belief and on investigation of Plaintiff’s counsel, except for allegations specifically pertaining to Plaintiff, which are based on Plaintiff’s personal knowledge.

NATURE OF THE ACTION

1. This is an action under the California Unfair Competition Law and False Advertising Law to enjoin Coca-Cola and the ABA from engaging in false and misleading marketing of sugar-sweetened beverages.¹ Plaintiff also asserts claims for the intentional and negligent breach of a special duty.

2. Coca-Cola, the leading manufacturer and supplier in the world of sugar-sweetened beverages, deceives consumers about their health impact. It does so independently, and also with the assistance of and through statements made by the American Beverage Association, a trade organization which Coca-Cola funds and materially directs.

3. For years, Defendants have engaged in a pattern of deception to mislead and confuse the public (and governmental entities that bear responsibility for the public health) about the scientific consensus that consumption of sugar-sweetened beverages is linked to obesity, type 2 diabetes, and cardiovascular disease.

4. Defendant Coca-Cola has also engaged in a pattern of deception to mislead the public (and governmental entities that bear responsibility for the public health) regarding its advertising to children.

5. Although Defendants have publicly pledged allegiance to objective scientific criteria, they have instead represented falsely that sugar-sweetened beverages are not scientifically linked to obesity, diabetes, and cardiovascular disease, and have waged an

¹ “Sugar-sweetened beverage” refers to any carbonated or non-carbonated drink that is sweetened with sugar or high fructose corn syrup, or other caloric sweeteners, including soda, fruit drinks, teas, coffees, sports drinks, and energy drinks. CTRS. FOR DISEASE CONTROL & PREVENTION, THE CDC GUIDE TO STRATEGIES FOR REDUCING THE CONSUMPTION OF SUGAR-SWEETENED BEVERAGES 4 (2010), <http://goo.gl/OWgFs>.

1 aggressive campaign of disinformation about the health consequences of consuming sugar-
2 sweetened beverages.

3 6. Defendants have undertaken these actions even though they know and have
4 known that sugar-sweetened beverages are linked to serious medical conditions, including
5 obesity, diabetes, and cardiovascular disease, when consumed regularly.

6 7. Although Defendant Coca-Cola promised that it would not advertise sugar-
7 sweetened beverages to children, it has advertised to children on a massive scale.

8 8. A primary purpose of these ongoing campaigns of disinformation and
9 misrepresentation is to maintain and increase the sales of sugar-sweetened beverages, and to
10 thwart and delay efforts of government entities to regulate sugar-sweetened beverages through
11 warning labels, taxes, and other measures designed to make consumers aware of the potential for
12 harm.

13 9. Defendants have engaged in this conduct despite knowing that sugar-sweetened
14 beverages are scientifically linked to obesity, diabetes, and cardiovascular disease, and these
15 diseases are at epidemic levels in California and the United States.

16 10. Each year, millions of Californians, and others across the United States, will
17 either develop, or develop the markers for, obesity, type 2 diabetes, and/or cardiovascular
18 disease, owing at least in part to consumption of sugar-sweetened beverages.

19 11. Each year, Coca-Cola reaps huge profits from the sale of its sugar-sweetened
20 beverages.

21 12. Each year, Coca-Cola spends billions of dollars on misleading and deceptive
22 promotions and advertising that have enormous appeal to consumers, including children, which
23 advertising effects persist over years.

24 13. Plaintiff seeks injunctive relief for the conduct alleged in the complaint. Among
25 other things, Plaintiff seeks a permanent injunction to require the Defendants to: publicly
26 disclose their files on the potential health implications of consuming sugar-sweetened beverages;
27 fund a public education campaign to educate consumers about the association between sugar-
28 sweetened beverage consumption and obesity, diabetes, and cardiovascular disease; cease

prospectively all deceptive advertising and promotions that imply in any manner that sugar-sweetened beverage consumption is not linked to obesity, diabetes, and cardiovascular disease, and conversely is healthy; and, in the case of Coca-Cola, cease all advertising that reaches children under the age of 12 in significant numbers.

PARTIES

14. Plaintiff Praxis is a nonprofit corporation pursuant to section 501(c)(3) of the Internal Revenue Code, with offices in Oakland, California, and Washington, DC. Plaintiff's mission is to build healthier communities, and through the efforts of its staff, Plaintiff engages in significant advocacy relating to sugar-sweetened beverages and the health consequences of their frequent consumption. Plaintiff's work is well recognized, including but not limited to the efforts of its Executive Director, Xavier Morales. As alleged in more detail below, Plaintiff has diverted significant resources to its advocacy concerning sugar-sweetened beverages. This diversion has prevented Plaintiff from allocating resources to other projects that advance healthier communities. Plaintiff could have avoided many of these expenditures if Defendants had not engaged in deception about the consequences of consuming sugar-sweetened beverages, consistent with its legal duty.

15. Defendant Coca-Cola is a public corporation, organized and existing under the laws of the State of Delaware, and headquartered in Atlanta, Georgia. Coca-Cola describes itself as the largest manufacturer, distributor, and marketer of nonalcoholic beverage concentrates and syrups in the world, many of which are sugar-sweetened beverages, including its flagship Coca-Cola, or Coke. In 2012, Coca-Cola's gross profits were \$28.96 billion.² In 2012, its advertising budget was \$3.34 billion.³

16. Defendant American Beverage Association is a trade association headquartered in Washington, DC that represents the manufacturers, bottlers and distributors of various drinks,

² The Coca-Cola Co., Annual Report (Form 10-K), at 50 (Feb. 27, 2013), <http://goo.gl/RzMbtF> (FY 2012).

³ *Id.* at 54.

including sugar-sweetened beverages. Coca-Cola executives help manage and direct the ABA, and materially fund its operations.

JURISDICTION AND VENUE

17. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1332 because Plaintiff and Defendants are citizens of different states and the amount in controversy exceeds \$75,000.

18. The Court has personal jurisdiction over Defendant Coca-Cola because it conducts substantial business in this district and throughout the State of California, and over Defendant American Beverage Association because it has made statements in this district and has specifically sought to influence consumer perceptions on sugar-sweetened beverages in this district.

19. Venue is proper in this Court under 28 U.S.C. § 1391(b) because a substantial number of the acts and omissions alleged herein occurred within this district.

ALLEGATIONS COMMON TO ALL CLAIMS FOR RELIEF

I. HEALTH CONSEQUENCES OF SUGAR-SWEETENED BEVERAGE CONSUMPTION

20. The American Heart Association recommends a daily maximum of six (6) teaspoons of added sugar for adult women and children, and nine (9) teaspoons for men.⁴

21. A 16-ounce bottle of Coke, by comparison, has 12 teaspoons of sugar, a 15-ounce bottle of Coca-Cola's Minute Maid Cranberry Grape Juice Beverage has approximately 13 teaspoons of added sugar, and a 20-ounce bottle of the company's vitaminwater has 8 teaspoons.⁵ Twelve teaspoons of sugar is 200% of the AHA recommended daily maximum for women, and more than twice the sugar content of a Twix candy bar.⁶

⁴ *Added Sugars*, AM. HEART ASS'N, <http://goo.gl/PoigAa> (last visited Jan. 4, 2017).

⁵ Of the parents who purchased vitaminwater for their children, 78% thought it was healthy. Tina Rosenberg, *Labeling the Danger in Soda*, N.Y. TIMES (March 30, 2016), <http://goo.gl/TnryHW>.

⁶ *Id.*

22. Sugar-sweetened beverages are the leading source of added sugars in the American diet.⁷

23. Sugar-sweetened beverage consumption is scientifically linked to obesity, type 2 diabetes, and cardiovascular disease.

24. Stronger evidence links these diseases with the consumption of sugar-sweetened beverages than with the consumption of added sugar in non-liquid forms.⁸

25. Numerous governmental and medical bodies have recognized this link, including the Centers for Disease Control and Prevention (“CDC”), the 2015 Dietary Guidelines Advisory Committee, the Institute of Medicine, the American Heart Association, the Obesity Society, and the World Health Organization, and have urged reduction of sugar-sweetened beverage consumption, mainly as a means to address the epidemics of obesity, type 2 diabetes, and/or cardiovascular disease.

26. Consistent with these conclusions and recommendations, and after entertaining key expert testimony, this Court found that the warning required on certain sugar-sweetened beverage advertisements in San Francisco—which reads, “WARNING: Drinking beverages with added sugar(s) contributes to obesity, diabetes, and tooth decay”—is “factual and accurate.”⁹

⁷ U.S. DEP’T OF AGRIC. & U.S. DEP’T OF HEALTH & HUMAN SERVS., SCIENTIFIC REPORT OF THE 2015 DIETARY GUIDELINES ADVISORY COMMITTEE 148 fig. D1.36 (2015) (DIETARY GUIDELINES ADVISORY COMMITTEE), <http://goo.gl/2rc9v3>.

⁸ CREDIT SUISSE, SUGAR CONSUMPTION AT A CROSSROADS 8–9 (2013), <https://goo.gl/7rMhXY>; Expert Report of Walter Willett at ¶ 10, *Am. Beverage Ass’n v. City & Cty. of San Francisco*, No. 3:15-cv-03415-EMC (N.D. Cal. filed Feb. 23, 2016) (“Willett Report”).

⁹ *Am. Beverage Ass’n v. City & Cty. of San Francisco*, No. 3:15-cv-03415-EMC, 2016 WL 2865893, at *18 (N.D. Cal. May 17, 2016).

27. Studies tracking thousands of adults for years show that those who consume sugar-sweetened beverages have higher rates of obesity and obesity-related chronic diseases.¹⁰

28. One highly regarded study (double-blind, randomized controlled intervention trial (“RCT”)) involving 641 Dutch children reported that those who were given just one 8-ounce sugar-sweetened drink a day gained more weight and body fat over 1½ years than those who were given sugar-free drinks. Similar findings have been reported in a number of other clinical trials on adults and children.¹¹

29. Scientific research has also established a link between the consumption of sugar-sweetened beverages and type 2 diabetes, which is only partly due to the impact of sugar-sweetened beverages on weight gain.

¹⁰ See, e.g., Ravi Dhingra et al., *Soft Drink Consumption and Risk of Developing Cardiometabolic Risk Factors and the Metabolic Syndrome in Middle-Aged Adults in the Community*, 116 CIRCULATION 480 (2007); Frank B. Hu & Vasanti S. Malik, *Sugar-Sweetened Beverages and Risk of Obesity and Type 2 Diabetes: Epidemiologic Evidence*, 100 PHYSIOLOGY & BEHAV. 47 (2010); Vasanti S. Malik et al., *Sugar Sweetened Beverages and Weight Gain in Children and Adults: A Systematic Review and Meta-Analysis*, 98 AM. J. CLINICAL NUTRITION 1084 (2013); Julie R. Palmer et al., *Sugar-Sweetened Beverages and Incidence of Type 2 Diabetes Mellitus in African American Women*, 168 ARCHIVES INTERNAL MED. 1487 (2008); Qibin Qi et al., *Sugar-Sweetened Beverages and Genetic Risk of Obesity*, 367 NEW ENG. J. MED. 1387 (2012); Matthias B. Schulze et al., *Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women*, 292 JAMA 927 (2004); Jiantao Ma, *Sugar-Sweetened Beverage but Not Diet Soda Consumption Is Positively Associated with Progression of Insulin Resistance*, J. OF NUTRITION 234047 (Nov. 9, 2016), <http://jn.nutrition.org/content/early/2016/11/09/jn.116.234047.full.pdf+html>.

¹¹ Janne C. de Ruyter et al., *A Trial of Sugar-Free or Sugar-Sweetened Beverages and Body Weight in Children*, 367 NEW ENG. J. MED. 1397 (2012); see also Cara B. Ebbeling et al., *A Randomized Trial of Sugar-Sweetened Beverages and Adolescent Body Weight*, 367 NEW ENG. J. MED. 1407 (2012); Cara B. Ebbeling et al., *Effects of Decreasing Sugar-Sweetened Beverage Consumption on Body Weight in Adolescents: A Randomized Controlled Pilot Study*, 117 PEDIATRICS 673 (2006); Janet James et al., *Preventing Childhood Obesity by Reducing Consumption of Carbonated Drinks: Cluster Randomised Controlled Trial*, 328 BMJ 1237 (2004); Anne Raben et al., *Increased Postprandial Glycaemia, Insulinemia, and Lipidemia After 10 Weeks’ Sucrose-Rich Diet Compared to an Artificially Sweetened Diet: A Randomized Controlled Trial*, 55 FOOD NUTRITION RES. 5961 (2011); Anne Raben et al., *Sucrose Compared with Artificial Sweeteners: Different Effects on Ad Libitum Food Intake and Body Weight After 10 Wk of Supplementation in Overweight Subjects*, 76 AM. J. CLINICAL NUTRITION 721 (2002); Michael G. Tordoff & Anne M. Alleva, *Effect of Drinking Soda Sweetened with Aspartame or High-Fructose Corn Syrup on Food Intake and Body Weight*, 51 AM. J. CLINICAL NUTRITION 963 (1990).

30. Put another way, the consumption of sugar-sweetened beverages is linked to an increase in type 2 diabetes even after researchers account for the impact of sugar-sweetened beverages on weight.¹²

31. The 2015 Dietary Guidelines Advisory Committee concluded that “[s]trong evidence shows that higher consumption of added sugars, especially sugar sweetened beverages, increases the risk of type 2 diabetes among adults and this relationship is not fully explained by body weight.”¹³

32. Scientific studies also link sugar-sweetened beverage consumption to a higher risk of other obesity-related conditions, including coronary heart disease and stroke (collectively, cardiovascular disease).¹⁴

33. A systematic review and meta-analysis of 39 randomized clinical trials concluded that higher intakes of sugars are associated with risk factors for cardiovascular disease including

¹² Ravi Dhingra et al., *Soft Drink Consumption and Risk of Developing Cardiometabolic Risk Factors and the Metabolic Syndrome in Middle-Aged Adults in the Community*, 116 CIRCULATION 480 (2007); Darren C. Greenwood et al., *Association Between Sugar-Sweetened and Artificially Sweetened Soft Drinks and Type 2 Diabetes: Systematic Review and Dose-Response Meta-Analysis of Prospective Studies*, 112 BRIT. J. NUTRITION 725 (2014); Fumiaki Imamura et al., *Consumption of Sugar Sweetened Beverages, Artificially Sweetened Beverages, and Fruit Juice and Incidence of Type 2 Diabetes: Systematic Review, Meta-Analysis, and Estimation of Population Attributable Fraction*, 351 BMJ h3576 (2015); Lawrence de Koning et al., *Sugar-Sweetened and Artificially Sweetened Beverage Consumption and Risk of Type 2 Diabetes in Men*, 93 AM. J. CLINICAL NUTRITION 1321 (2011); Vasanti S. Malik et al., *Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes: A Meta-Analysis*, 33 DIABETES CARE 2477 (2010); Andrew O. Odegaard et al., *Soft Drink and Juice Consumption and Risk of Physician-Diagnosed Incident Type 2 Diabetes*, 171 AM. J. EPIDEMIOLOGY 701 (2010); Julie R. Palmer et al., *Sugar-Sweetened Beverages and Incidence of Type 2 Diabetes Mellitus in African American Women*, 168 ARCHIVES INTERNAL MED. 1487 (2008); Matthias B. Schulze et al., *Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women*, 292 JAMA 927 (2004); The InterAct Consortium, *Consumption of Sweet Beverages and Type 2 Diabetes Incidence in European Adults: Results from EPIC-InterAct*, 56 DIABETOLOGIA 1520 (2013).

¹³ DIETARY GUIDELINES ADVISORY COMMITTEE, *supra* note 7, at Part D, Chapter 6, p. 20; accord Willett Report, *supra* note 8, at ¶ 51 (“Findings from well-designed prospective cohort studies have shown a strong and consistent association between SSB consumption and diabetes.”).

¹⁴ Adam M. Bernstein et al., *Soda Consumption and the Risk of Stroke in Men and Women*, 95 AM. J. CLINICAL NUTRITION 1190 (2012); Lawrence de Koning et al., *Sweetened Beverage Consumption, Incident Coronary Heart Disease, and Biomarkers of Risk in Men*, 125 CIRCULATION 1735 (2012); Teresa T. Fung et al., *Sweetened Beverage Consumption and Risk of Coronary Heart Disease in Women*, 89 AM. J. CLINICAL NUTRITION 1037 (2009).

1 higher levels of triglycerides, LDL ("bad") cholesterol, and blood pressure, and that "the relation
2 is independent of effects of sugars on body weight."¹⁵

3 34. Thus, the Dietary Guidelines Advisory Committee said, "higher intake of added
4 sugars, especially in the form of sugar-sweetened beverages, is consistently associated with
5 increased risk of hypertension, stroke, and [cardiovascular disease] in adults."¹⁶

6 35. Likewise, "[T]he recommendations from the Institute of Medicine, the American
7 Heart Association, the Obesity Society, and many other organizations [are] to reduce the
8 consumption of sugar-sweetened beverages in both children and adults."¹⁷

9 36. This is because the "consumption of sugar-sweetened beverages causes excess
10 weight gain and is associated with increased risk of type 2 diabetes and cardiovascular disease;
11 thus, these beverages are unique dietary contributors to obesity and related chronic diseases."¹⁸

12 37. Today, roughly one-third of children and two-thirds of adults in the United States
13 are overweight or obese.¹⁹ Since 1980, obesity rates in the United States have tripled in
14 children,²⁰ and doubled in adults.²¹

15
16
17 ¹⁵ Te Morenga LA, et al. *Dietary Sugars and Cardiometabolic Risk: Systematic Review and*
18 *Meta-analyses of Randomized Controlled Trials of the Effects on Blood Pressure and Lipids*,
AM. J. CLINICAL NUTRITION 65-79 (2014).

19 ¹⁶ DIETARY GUIDELINES ADVISORY COMMITTEE, *supra* note 7, at Part D, Chapter 6, p. 20.

20 ¹⁷ Sonia Caprio, *Calories from Soft Drinks—Do They Matter?*, 367 NEW ENG. J. MED. 1462, 1463
(2012).

21 ¹⁸ Vasanti S. Malik & Frank B. Hu, *Fructose and Cardiometabolic Health: What the Evidence from*
Sugar-Sweetened Beverages Tells Us, 66 J. AM. C. CARDIOLOGY 1615 (2015).

22 ¹⁹ Cynthia L. Ogden et al., *Prevalence of Childhood and Adult Obesity in the United States, 2011–*
23 *2012*, 311 JAMA 806 (2014). Worldwide, according to McKinsey & Company, "almost half of the
24 world's adult population could be overweight or obese by 2030." MCKINSEY GLOB. INST.,
OVERCOMING OBESITY: AN INITIAL ECONOMIC ANALYSIS 11 (2014) (internal citation omitted). The
25 McKinsey Report added a critical public health perspective: the 2.1 billion obese or overweight
people in the world is two and a half times the number of undernourished people. *Id.* at 14.

26 ²⁰ CYNTHIA OGDEN & MARGARET CARROLL, CTRS. FOR DISEASE CONTROL & PREVENTION,
PREVALENCE OF OBESITY AMONG CHILDREN AND ADOLESCENTS: UNITED STATES, TRENDS 1963–
1965 THROUGH 2007–2008, at 5 (2010), <https://goo.gl/6afktw>.

27 ²¹ CHERYL D. FRYAR, MARGARET D. CARROLL & CYNTHIA L. OGDEN, CTRS. FOR DISEASE CONTROL
28 & PREVENTION, PREVALENCE OF OVERWEIGHT, OBESITY, AND EXTREME OBESITY AMONG ADULTS:
UNITED STATES, 1960–1962 THROUGH 2011–2012, at tbl. 2 (2014), <http://goo.gl/dc2UHv>.

38. Fifty-five percent (55%) of adult Californians are estimated to have diagnosed diabetes, undiagnosed diabetes, or pre-diabetes.²²

39. Forty-six percent (46%) of adults in the United States have pre-diabetes or diabetes.²³

40. Estimates on the annual cost of medical care and premature mortality attributable to the consumption of sugar-sweetened beverages are astronomical. For example, in New York City alone, the figure is estimated at between \$16.4 billion and \$17.96 billion.²⁴

II. DEFENDANTS' FALSE PROMISES AND MISREPRESENTATIONS

41. In 2012, faced with an established and growing body of scientific research linking its products to obesity, type 2 diabetes, and cardiovascular disease, Coca-Cola and the ABA ramped up their campaign of misrepresentation and deception.

42. Around the same time, various other city, county, and state regulators, as well as foreign governments, were openly discussing a variety of measures intended to address the epidemics of obesity, diabetes, and cardiovascular disease, and consumer misperceptions of sugar-sweetened beverages and their potential for harm.

43. To combat this perceived threat to the security of the company's products and corporate profitability, Coca-Cola executives embarked on an intensive public speaking and marketing campaign in which they knowingly made material misrepresentations and omissions to the public and, upon information and belief, to various governmental entities tasked with protecting the public health, about the health consequences of consuming their sugar-sweetened beverage products.

²² SUSAN H. BABEY ET AL., UCLA CTR. FOR HEALTH POLICY RESEARCH, PREDIABETES IN CALIFORNIA: NEARLY HALF OF CALIFORNIA ADULTS ON PATH TO DIABETES 1 (2016), <https://goo.gl/f3NKqI>.

²³ NATIONAL DIABETES STATICS REPORT OF THE CDC (2014), <https://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>.

²⁴ Shi-Ling Hsu, *A Cost-Benefit Analysis of Sugary Drink Regulation in New York City*, 10 J. FOOD L. & POL'Y 73, 103 tbl. 12 (2014).

1 44. In particular, Coca-Cola falsely propounded that sugar-sweetened beverages are
2 not linked to obesity, type 2 diabetes, or cardiovascular disease.

3 45. As part of this misrepresentation, Coca-Cola executives and agents misleadingly
4 sought to divert focus from sugar-sweetened beverage consumption to a purported lack of
5 exercise as the explanation for the rise in obesity-related chronic conditions, despite the fact that
6 they knew this explanation was not scientifically sound. To do this, Coca-Cola employed, and
7 together with the American Beverage Association continues to employ, various euphemisms like
8 “balance,” “calories in, calories out,” and “mixify.”

9 46. Defendants have made these representations in the face of an overwhelming body
10 of evidence establishing that sugar-sweetened beverages are linked to obesity, diabetes, and
11 cardiovascular disease, and that exercise alone—particularly of the type promoted by
12 Defendants—does not protect consumers from these harms.

13 47. Defendants continue to deny that sugar-sweetened beverages are linked to
14 obesity, diabetes type-2, and cardiovascular disease, and continue to misrepresent the science on
15 sugar-sweetened beverages despite widespread agreement in the scientific and medical
16 communities that sugar-sweetened beverages are a primary cause of obesity, type 2 diabetes, and
17 cardiovascular disease.

18 48. In addition to engaging in this deceptive campaign to promote false facts to
19 consumers, Coca-Cola also took the following actions to respond to the growing scientific
20 evidence linking consumption of its products to obesity, type 2 diabetes, and cardiovascular
21 disease: (A) it secretly funded and publicly promoted biased scientific research, and intentionally
22 mischaracterized objective scientific research on sugar-sweetened-beverage-consumption; (B) it
23 funded and worked with the American Beverage Association to organize expensive initiatives
24 that promoted exercise, or “balance,” in California, across the United States, and globally, as an
25 alternative to reducing consumption of sugar-sweetened beverages; and (C) it ran false and
26 misleading advertising campaigns.

27
28

A. False Representations to Consumers by Coca-Cola and Its Front Groups

49. Faced with a growing scientific consensus linking its products to obesity, type 2 diabetes, and cardiovascular disease, Coca-Cola's top scientists and executives have unambiguously pledged and represented to the public that sugar-sweetened beverage consumption is not linked to obesity, type 2 diabetes, or cardiovascular disease. Coca-Cola's representatives have done so despite actual knowledge of facts to the contrary.

50. Coca-Cola knew or should have known that consumers (and regulatory agencies responsible for protecting their health) would consider the Coca-Cola's representations material to their decisions whether to purchase Coca-Cola's sugar-sweetened beverages, decisions that consumers otherwise would have modified had Coca-Cola been truthful in its representations and its public pledges about promoting unbiased science.

51. Coca-Cola's Senior Vice President, Katie Bayne, has repeatedly been quoted stating that "[t]here is no scientific evidence that connects sugary beverages to obesity."²⁵

52. Coca-Cola's former Chairman and Chief Executive Officer, Douglas Ivester, has made similar high publicity misrepresentations, such as that "Coca-Cola is an excellent complement to the habits of a healthy life."²⁶

53. Coca-Cola also funded "front" groups, such as the Global Energy Balance Network ("GEBN") and the European Hydration Institute ("EHI"), that are presented to the public as disinterested research entities but are or were actually Coca-Cola-funded and used by Coca-Cola to more effectively misrepresent, suppress, and confuse the facts about sugar-sweetened beverages and their health dangers.

54. Dr. Steven Blair, the vice president of GEBN, which claimed to fund unbiased research into causes of obesity, put it this way: "Most of the focus in the popular media and the scientific press . . . blames . . . sugary drinks [for the obesity epidemic], and there is really

²⁵ Bruce Horowitz, *Coke Says Obesity Grew as Sugar Drink Consumption Fell*, USA TODAY (June 7, 2012), <http://goo.gl/w0jFU2> (statement by Coke executive Katie Bayne).

²⁶ *The Unhappy Truth About Soda*, CTR. FOR SCI. IN THE PUB. INTEREST, <http://www.therealbears.org/> (last visited Sept. 16, 2016).

1 virtually no compelling evidence that that, in fact, is the cause. Those of us interested in science,
2 public health, medicine, we have to learn how to get the right information out there.”²⁷

3 55. In 2015, claiming to be “the voice of science,” GEBN touted “strong evidence”
4 that the key to preventing weight gain is not reducing sugar-sweetened beverage intake, “but
5 maintaining an active lifestyle and eating more calories.”²⁸

6 56. EHI touts the same message in Europe.²⁹ Notably, like GEBN, EHI professes
7 independence.³⁰ However, Coca-Cola co-founded EHI, and its Director, Dr. Jane Holdsworth, is
8 a paid Coca-Cola consultant.³¹

9 57. Whether through GEBN, or various universities, Coca-Cola spent approximately
10 \$120 million, between 2010–2015 alone, surreptitiously funding various research and programs
11 intending to confuse and misrepresent the science on the link between sugar-sweetened
12 beverages and obesity, type 2 diabetes, and cardiovascular disease.³²

13 58. An analysis of beverage studies published in PLOS Medicine found that those
14 funded by Coca-Cola, PepsiCo, and the American Beverage Association were five times more
15 likely to find no link between sugar-sweetened beverages and obesity than studies whose authors
16 reported no financial conflicts.³³ A recent study found by Dr. Schillinger of the University of
17

18 ²⁷ CrossFit, *Dr. Steven Blair of Coca-Cola and ACSM’s Global Energy Balance Network*,
19 YOUTUBE (Sept. 10, 2015), <https://goo.gl/h14Yq8>.

20 ²⁸ Anahad O’Connor, *Coca-Cola Funds Scientists Who Shift Blame for Obesity Away from Bad*
21 *Diets*, N.Y. TIMES (Aug. 9 2015), <http://goo.gl/tpfrg7> (quoting GEBN’s now-discontinued
22 website). *See also* Anahad O’Connor, *Coke’s Chief Scientist, Who Orchestrated Obesity*
Research, Is Leaving, N.Y. TIMES (Nov. 24, 2015), <http://goo.gl/u33ZNF> (while Coca-Cola said
it had no influence on GEBN, “reports show that Dr. Applebaum and other executives at Coke
helped pick the group’s leaders, create its mission statement and design its website”).

23 ²⁹ EUROPEAN HYDRATION INST., <http://goo.gl/JEKIb> (last visited Sept. 15, 2016).

24 ³⁰ “The members of the Science Advisory Board of the EHI do not have any conflicts of interest with
any commercial organization.” *Id.* (quote de-italicized).

25 ³¹ *What Is the European Hydration Institute?*, EUROPEAN HYDRATION INST., <http://goo.gl/TGOr6W>
(last modified June 14, 2016; last visited Sept. 16, 2016).

26 ³² Anahad O’Connor, *Coke Discloses Millions in Grants for Health Research and Community*
27 *Programs*, N.Y. TIMES (Sept. 22, 2015), <http://goo.gl/hK48HC>.

28 ³³ Anahad O’Connor, *Coca-Cola Funds Scientists Who Shift Blame for Obesity Away from Bad*
Diets, N.Y. TIMES (Aug. 9 2015), <http://goo.gl/tpfrg7> (referencing Maira Bes-Rastrollo et al.,
Financial Conflicts of Interest and Reporting Bias Regarding the Association Between Sugar-

California San Francisco’s Division of General Internal Medicine and Center for Vulnerable Populations, found an even greater impact. He found that 26 of 26 “negative” studies (finding no link between SSBs and obesity), or 100%, received funding from the soda industry, and only one of 34 “positive” studies received industry funding. His research led him to conclude that “[t]he SSB industry appears to be manipulating contemporary scientific processes to create controversy and advance their business interests at the expense of the public’s health.”³⁴

59. Just as the tobacco industry formed the Tobacco Industry Research Committee in 1953 to respond to scientific evidence linking smoking to lung cancer, Coca-Cola’s strategy was one of “cultivating relationships” with scientists as a way to “balance the debate” on sugar-sweetened beverages.³⁵ Dr. Rhona Applebaum, Coca-Cola’s “Chief Science and Health Officer” was put in charge of locating such scientists.

60. Applebaum funded Dr. James Hill, of the University of Colorado, for example, after he explicitly proposed publishing research that would help Coca-Cola fend off criticism about its products by shifting the blame for obesity to lack of physical activity. “I . . . could provide a strong rationale for why a company selling sugar water should focus on promoting physical activity. This would be a very large and expensive study, but could be a game changer. We need this study to be done.”³⁶

Sweetened Beverages and Weight Gain, 10 PLOS MEDICINE e1001578 (2013)). Another analysis found that beverage industry-funding studies are as much as eight times more likely to be favorable to industry’s marketing interests. Willett Report, *supra* note 8, at ¶ 27 (citing Leonard I. Lesser et al., *Relationship Between Funding Source and Conclusion Among Nutrition-Related Scientific Articles*, 4 PLOS MEDICINE e5 (2007)).

³⁴ Dr. Dean Schillinger, *Do Sugar-Sweetened Beverages Cause Obesity and Diabetes? Industry and the Manufacture of Scientific Controversy*, ANN AM. MEDICINE (NOV. 2016), <https://www.ncbi.nlm.nih.gov/pubmed/27802504>.

³⁵ Anahad O’Connor, *Coke’s Chief Scientist, Who Orchestrated Obesity Research, Is Leaving*, N.Y. TIMES (Nov. 24, 2015), <http://goo.gl/u33ZNF>.

³⁶ *Id.*

61. Dr. Hill further added, “I want to help your company avoid the image of being a problem in people’s lives and back to being a company that brings important and fun things to them.”³⁷

62. Coca-Cola’s Chief Executive Officer, Muhtar Kent, directed Dr. Applebaum to seek to persuade CBS to invite Dr. Hill on “CBS This Morning,” so as to have him help shape media coverage about sugar-sweetened beverages.³⁸

63. Meanwhile, Dr. Applebaum and various scientists misrepresented to the public and consumers that the science Coca-Cola was funding constituted totally independent research efforts with completely unrestricted funding.

64. Similarly, James Quincey, who is slated to become Defendant’s CEO as of May 2017, has repeatedly publicized that Coca-Cola’s role is to “get information [about obesity and SSBs] into people’s hands” to empower their “choices.” Put another way, that Defendant is “not trying to hide the information,” instead pledging that “we are focused on getting the information out there.” Contemporaneously, he shifted responsibility for the obesity and diabetes epidemics away from sugar-sweetened beverages and, explicitly, to a lack of activity, claiming that sugar-sweetened beverages constitute less than 2% of all calories, and by implication, bear only a tiny fraction of responsibility for the obesity epidemic.³⁹

65. Coca-Cola’s representations as to the state of the science, and about sponsoring independent and objective research and “bringing the facts to light,” were false and deceptive. They were made to gain the trust of the consuming public and to cast doubt on the substantial, credible science linking Coca-Cola’s products to obesity, diabetes, and cardiovascular disease.

66. Likewise, Coca-Cola funded and guided industry groups in promoting its deceptive campaign.

³⁷ *Id.*

³⁸ *Id.*

³⁹ BBC Interview by Jeremy Paxman with James Quincey, in London, England (Nov. 27, 2013), <https://www.youtube.com/watch?v=DWLQaz8nhQw> (last visited Jan. 4, 2017).

67. Defendant ABA, for example, is a trade association of soda manufacturers financed extensively by Coca-Cola. Sandy Douglas, President of Coca-Cola North America, sits on the board of directors of the ABA, along with *six other* Coca-Cola executives and affiliate executives, including Claude Nielsen of Coca-Cola Bottling Company United, who is also an ex-officio officer.⁴⁰

68. Beyond its management function, Coca-Cola principally funds the ABA, treating it as an arm of Coke’s public relations enterprise. Coca-Cola executives commonly refer to “working an issue through” the ABA.

69. As of September 2016, the ABA’s website was replete with misleading and materially incomplete representations about the link between sugar-sweetened beverages and obesity-related chronic diseases. For example, the following omits entirely the prominent role played by routine sugar-sweetened beverage consumption in the rise of obesity and related chronic diseases:

Soda is a hot topic. And the conversation is full of opinions and myths, but not enough facts. America’s beverage companies created this site to clear a few things up about the products we make. So read on. Learn. And share the clarity.

* * *

Fact: Obesity. Obesity is a complex condition, that can’t be boiled down to one specific product or ingredient. Many health organizations, including the Mayo Clinic, have found multiple risk factors including genetics, ages, and even lack of sleep.

* * *

Focusing on [soda]—ignores the bigger problem and doesn’t offer real solutions.⁴¹

⁴⁰ *Board of Directors*, AM. BEVERAGE ASS’N, <https://goo.gl/8lo6w> (last visited Sept. 16, 2016).

⁴¹ Am. Beverage Ass’n, *Home*, LET’S CLEAR IT UP, <http://goo.gl/Ft8VNp> (last visited Sept. 16, 2016); Am. Beverage Ass’n, *Health*, LET’S CLEAR IT UP, <http://goo.gl/NZCwGy> (last visited Sept. 16, 2016); Am. Beverage Ass’n, *Beverages*, LET’S CLEAR IT UP, <http://goo.gl/D1o8EI> (last visited Sept. 16, 2016).

70. Other red herrings advanced by the ABA include discussions of high fructose corn syrup (“HFCS”)—which is irrelevant because whether sugar-sweetened beverages are sweetened with HFCS or traditional sugar, their link with disease is established:

Myth: High Fructose Corn Syrup (HFCS) causes obesity and diabetes.

Fact: Actually, the American Medical Association has concluded that HFCS . . . is not a unique contributor to either obesity or type 2 diabetes. In fact, HFCS is so similar to sucrose (table sugar) that your body can’t tell the difference between the two and processes both in the same way.⁴²

71. ABA press releases follow the same approach, including:

- “You may have read articles recently suggesting that there is something unique about soda when it comes to diabetes. Yes, diabetes. It’s always something if you’re reading the headlines. But if you dig deep enough, there’s no ‘there’ there”;⁴³
- “[T]here’s nothing unique about beverage calories when it comes to obesity or any other health condition. Sadly, however, the days of simply enjoying a refreshing beverage are under assault – that is, if you choose to listen to our critics”;⁴⁴
- “Sugar isn’t the enemy, the problem is calories. . . . demonizing [] sugar isn’t going to improve public health”;⁴⁵
- “[T]he attack on added sugars is not founded on the totality of scientific evidence. . . . Like past false food scares, the anti-soda campaign misleads people with unsound science”;⁴⁶

⁴² Am. Beverage Ass’n, *Obesity*, LET’S CLEAR IT UP, <http://goo.gl/AAUPzD> (last visited Sept. 16, 2016).

⁴³ *Cut Through the Headlines and Get the Facts*, AM. BEVERAGE ASS’N (Nov. 8, 2013), <http://goo.gl/s1w3eK> (last visited Sept. 16, 2016).

⁴⁴ *Simply Soda*. . . , AM. BEVERAGE ASS’N (June 11, 2012), <http://goo.gl/JstcDx> (last visited Sept. 16, 2016).

⁴⁵ *Experts: Blaming Sugar Won’t Yield Results*, AM. BEVERAGE ASS’N (Oct. 1, 2015), <http://goo.gl/19E0Gm> (quoting, in part, Dr. John L. Sievenpiper) (last visited Sept. 16, 2016).

- “You may have seen some attention to research presented at an American Heart Association meeting that suggests that drinking two or more sugar-sweetened beverages per day increases the risk of cardiovascular disease among women. It’s always worth questioning a news report on a study if it only presents one side”;⁴⁷
- “In 1984, President Ronald Reagan designated July as National Ice Cream Month, recognizing ice cream as a fun and nutritious food that 90% of our population enjoys. . . . [W]e want to remind you to grab a beverage to go with your ice cream. It’s important to stay hydrated, especially in these warm summer months”;⁴⁸
- “Despite what you may read in frequent stories that come out in the media, sugar-sweetened beverages are not a unique driver of public health concerns such as obesity and diabetes. Simply put, it is wrong to say beverages cause disease”;⁴⁹
- “[A]ll calories are the same regardless of food source. . . . 100 calories from a donut or a yogurt is still 100 calories”;⁵⁰
- “Recently we’ve seen some food activists allege that sugar-sweetened beverages ‘cause’ obesity, diabetes and a host of other adverse health

⁴⁶ *The Added Sugar Fantasy*, AM. BEVERAGE ASS’N (June 17, 2015), <http://goo.gl/JngEQA> (last visited Sept. 16, 2016).

⁴⁷ *Here We Go Again . . .*, AM. BEVERAGE ASS’N (Nov. 14, 2011), <http://goo.gl/0Ywg96> (last visited Sept. 16, 2016).

⁴⁸ *Did You Get Your Ice Cream*, AM. BEVERAGE ASS’N (July 26, 2013), <http://goo.gl/Y1emwi> (last visited Sept. 16, 2016).

⁴⁹ *Taking a Closer Look at Recent Studies on Diabetes*, AM. BEVERAGE ASS’N (July 23, 2015), <http://goo.gl/JQtXgK> (last visited Sept. 16, 2016).

⁵⁰ *Setting the Record Straight on Calories*, AM. BEVERAGE ASS’N (Sept. 16, 2015), <http://goo.gl/0HVVYB3> (quoting Megan Meyer, PhD, program manager of health and wellness communications at the Int’l Food Info. Council—a Coca-Cola-funded group) (last visited Sept. 16, 2016).

conditions. Obviously they are hoping you never look at the science behind their claims. Because it doesn't exist";⁵¹

- "According to leading health organizations, beverage consumption is not a known risk factor for type 2 diabetes . . .";⁵² or
- "Overconsumption of anything (even water) can be risky."⁵³

72. The ABA's Americans for Food and Beverage Choice regularly pushes misrepresentations through multiple media outlets as well. Such as statements that:

- "Managing diabetes is all about balancing what you eat with your activity level. . . . A daily soda is fine";⁵⁴
- "[E]liminating soda and sugary beverages from your diet will not save your health any more than over-emphasizing fruits and vegetables;"⁵⁵ and
- "The same holds true for headlines that say drinking soda can cause obesity, type 2 diabetes, or heart disease. What's missing from those unfounded statements is any evidence from randomized clinical trials."⁵⁶

73. Coca-Cola also pays individual health professionals to promote sugar-sweetened beverages. According to Coca-Cola spokesperson Ben Sheidler, Coca-Cola "ha[s] a network of dietitians we work with." In February of 2015, these dietitians wrote numerous online pieces for

⁵¹ *Clearing up the Conversation on Beverages*, AM. BEVERAGE ASS'N (June 24, 2015), <http://goo.gl/tkL2Se> (last visited Sept. 16, 2016).

⁵² *Beverage Industry Responds to British Medical Journal Paper on Diabetes*, AM. BEVERAGE ASS'N (July 22, 2015), goo.gl/mwdZYU (last visited Jan. 13, 2017).

⁵³ *Overconsumption of Anything (Even Water) Can Be Risky*, AM. BEVERAGE ASS'N (Aug. 3, 2015), <http://goo.gl/SvKeb2> (last visited Sept. 16, 2016).

⁵⁴ Amy Myrdal Miller, *You Can't Eat That! And Other Bad Advice*, AMS. FOR FOOD & BEVERAGE CHOICE (Apr. 25, 2016), <http://goo.gl/htslCQ> (last visited Sept. 16, 2016).

⁵⁵ Kim Galeaz, *Veggie Halos and Soda Demons*, AMS. FOR FOOD & BEVERAGE CHOICE (Jan. 12, 2015), <https://goo.gl/t5xdD2> (last visited Jan. 13, 2017).

⁵⁶ Robyn Flipse, *Bacon, Soda, and Longevity – What's the Connection*, AMS. FOR FOOD & BEVERAGE CHOICE (Aug. 24, 2015), <http://goo.gl/bH58TU> (last visited Sept. 16, 2016).

American Heart Month, each including the suggestion that a soda could be a healthy snack, “like . . . packs of almonds.”⁵⁷

74. While designed to look like regular stories, the pieces were sponsored by Coca-Cola, and ran in 1,000 or more news outlets. Sometimes the authors indicated that they were “consultants,” other times not—but rarely if ever did any disclaimer make clear that Coca-Cola paid for the columns even though such nutritionists presented themselves as trustworthy authorities.⁵⁸

B. Balance & Hydration: Coca-Cola’s Deceptive Advertising Campaign

75. As part of its concerted campaign to shift attention away from the substantial, credible science linking sugar-sweetened beverages to obesity, diabetes, and cardiovascular disease, Coca-Cola also developed a direct advertising campaign that falsely and misleadingly promoted to consumers that they could “balance” their consumption of sugar-sweetened beverages with exercise and through careful monitoring of “calories-in, calories-out.”

76. Directly through its own advertising and through the ABA, Coca-Cola falsely and misleadingly advertised that balance—of calories in and calories out—enables healthful consumption of sugar-sweetened beverages and prevents obesity.

77. However, the scientific consensus is that exercise, especially light exercise like the “75 seconds of laughing out loud” featured in one ad by Coca-Cola,⁵⁹ cannot offset the negative health effects, including obesity and related chronic diseases, of drinking sugar-sweetened beverages.

78. While health authorities such as the federal government’s 2008 Physical Activity Guidelines encourage people to exercise, these same Guidelines acknowledge that “the contribution that physical activity makes to weight loss and weight stability is relatively small.”⁶⁰

⁵⁷ Candice Choi, *Coca-Cola Teams up with Nutritionists to Push Coke as Healthy Treat*, FOOD MANUFACTURING (Mar. 16, 2015), <http://goo.gl/CnWLgA>.

⁵⁸ *Id.*

⁵⁹ See The Coca-Cola Co., *Be OK*, YOUTUBE (Jan. 16, 2013), <https://goo.gl/12e520> (video advertisement by Coke) (last visited Sept. 16, 2016).

⁶⁰ See, e.g., Guidelines, https://health.gov/paguidelines/report/G4_energy.aspx#q1c.

79. The tiny expenditures of exercise suggested in Coca-Cola ads pale in comparison to the quantity of exercise needed to redress excess calories from sugar-sweetened beverages. Furthermore studies find that even intensive exercise programs often fail to lead to expected weight loss.⁶¹

80. As Dr. Margaret Chan, Director-General of the World Health Organization, told the annual meeting of the National Academy of Medicine in October 2016:

When crafting preventive strategies, government officials must recognize that the widespread occurrence of obesity and diabetes throughout a population is not a failure of individual willpower to resist fats and sweets or exercise more. It is a failure of political will to take on powerful economic operators, like the food and soda industries.⁶²

81. Coca-Cola's advertising campaigns, however, represent otherwise.⁶³

82. For example, the "Be Ok" advertising campaign, which ran extensively in the United States, including during the popular television show American Idol and the Super Bowl, implied that light activities—always undertaken by trim and fit models, instead of overweight,

⁶¹ See, e.g., Timothy S. Church et al., *Changes in Weight, Waist Circumference and Compensatory Responses with Different Doses of Exercise Among Sedentary, Overweight Postmenopausal Women*, 4 PLOS ONE e4515 (2009) (increased food intake because of heightened hunger); Emily J. Dhurandhar et al., *Predicting Adult Weight Change in the Real World*, 39 INT'L J. OBESITY (LONDON) 1181 (2015) (metabolic compensation via slowing of basal rate); Edward L. Melanson et al., *Resistance to Exercise-Induced Weight Loss: Compensatory Behavioral Adaptations*, 45 MED. & SCI. SPORTS & EXERCISE 1600 (2013) (compensatory behaviors like resting post exercise); Herman Pontzer et al., *Constrained Total Energy Expenditure and Metabolic Adaptation to Physical Activity in Adult Humans*, 26 CURRENT BIOLOGY 410 (2016) (energy expenditure ceiling); K. A. Shaw et al., *Exercise for Overweight or Obesity*, Cochrane Libr., Oct. 18, 2006 (meta-analysis of studies showing exercise does not equate with weight loss); D. M. Thomas et al., *Why Do Individuals Not Lose More Weight from an Exercise Intervention at a Defined Dose? An Energy Balance Analysis*, 13 OBESITY REV. 835 (2012) (overestimation of how much energy exercise burned versus calories taken in); Klaas R. Westerterp, *Physical Activity and Physical Activity Induced Energy Expenditure in Humans: Measurement, Determinants, and Effects*, 4 FRONTIERS PHYSIOLOGY 90 (2013) (exercise accounts for small portion of daily calorie burn (10-30%) whereas calories in accounts for 100% of energy intake of the body).

⁶² Dr. Margaret Chan, *Obesity and diabetes: the slow-motion disaster*, KEYNOTE ADDRESS 47TH MTG OF THE NATIONAL ACADEMY OF MEDICINE, [HTTP://WWW.WHO.INT/DG/SPEECHES/2016/OBESITY-DIABETES-DISASTER/EN/](http://www.who.int/dg/speeches/2016/obesity-diabetes-disaster/en/).

⁶³ Tiffany Hsu, *Coca-Cola Takes on Obesity Issue in Prime-Time Ad Campaign*, L.A. TIMES (Jan. 14, 2013), <http://goo.gl/HMDF7F>; *Coca-Cola Ad Pushes Exercise, Soft Drink Moderation*, AJC.COM (Jan. 14, 2013); <http://goo.gl/OOOP4m>.

1 obese or diabetic consumers—like laughing for 75 seconds, or doing a victory jig in the bowling
2 alley, or 15 minutes of happy dancing—would offset the harmful health consequences of
3 consuming sugar-sweetened beverages. *See* Illustrations 1–3.

4 Illustrations 1–3

5 “A 12oz can of Coke = 140 calories. There are many ways to burn those calories
6 through EXTRA physical activity and have fun while doing so. Balance your
7 lifestyle. **Be OK. Open happiness.** Visit <http://comingtogether.com>.”



18 Coca-Cola: 'Be OK' 139 calories advert



Be OK



The Coca-Cola Co. ✓

Subscribe 11,180

110,554



Coca-Cola: 'Be OK' 139 calories advert

83. Coca-Cola's claims are prolific that avoiding obesity and other bad health outcomes is substantially about "balance," or "energy in and energy out."

84. Coca-Cola has extensively promoted the claim that “[s]ugary drinks can be a part of any diet as long as your calories in balance with the calories out.”⁶⁴

85. Likewise, the “Mixify” multi-platform advertising campaign, sponsored by Coca-Cola, the American Beverage Association, and other sugar-sweetened beverage producers, pitches kids on the notion that they should not be concerned about added sugar or calories. It encourages them to consume sugar-sweetened beverages and then exercise more.⁶⁵ Advertisements sponsored by Coca-Cola through the Mixify campaign advise kids, “Just finished an afternoon of Frisbee? Maybe you’ve earned a little more [soda].”⁶⁶

86. Coca-Cola’s “Coming Together” advertising campaign promotes a related deception. It proclaims, “All calories count. No matter where they come from including Coca-Cola and everything else with calories.”⁶⁷ This statement is misleading given the health consequences associated with drinking sugar-sweetened beverages, and their lack of nutritional value.

87. As Professor Ruth Fagan, Wagley Professor of Biomedical Ethics and Director of the Johns Hopkins Berman Institute of Bioethics, said of the Coming Together campaign,

For Coca-Cola to suggest that all calories are equal flies in the face of reality. . . . Coca-Cola wants us to ignore the considerable research confirming that sugary soda is a major contributor to obesity, and that it has no nutritional value.⁶⁸

88. The Coming Together campaign also flies in the face of the CDC’s conclusion that all calories are not equal because, among other things, “individuals may fail to compensate

⁶⁴ *Coke Executive Answers Questions About Sugary Drinks*, USA TODAY (June 7, 2012), <http://goo.gl/z1SPqh> (statement made by Coke executive Katie Bayne during interview).

⁶⁵ *Find Your Mixify*, MIXIFY, <http://goo.gl/6U05e7> (last visited Sept. 15, 2016).

⁶⁶ *MyMixify*, *MyMixify*, YOUTUBE (Sept. 23, 2014), <https://goo.gl/8azpWA> (last visited Sept. 16, 2016).

⁶⁷ Isabela Carvalho Santos, *Coming Together The Real Ad from Coca Cola*, YOUTUBE (Oct. 25, 2013), <https://goo.gl/fZkvRO> (video advertisement by Coke) (last visited Sept. 16, 2016).

⁶⁸ Ruth Faden, *Coke’s Unconscionable New Ad*, THE ATLANTIC (Jan. 25, 2013), <http://goo.gl/eGYEgI>.

for . . . calories consumed as liquid.”⁶⁹ More, some calories have nutritional value, and others are neutral or adverse nutritionally; this distinction is the rationale for Dietary Guidelines.

89. As part of Coca-Cola’s insistence on refocusing the sugar-sweetened beverage conversation around exercise and balance, in 2014, it spent \$22 million on “physical activity” programs internationally,⁷⁰ in which it also advertised its products.⁷¹ See Illustrations 4 & 5.⁷²

⁶⁹ CTRS. FOR DISEASE CONTROL & PREVENTION, THE CDC GUIDE TO STRATEGIES FOR REDUCING THE CONSUMPTION OF SUGAR-SWEETENED BEVERAGES 4 (2010), <http://goo.gl/OWgFs>; accord Robin P. Bolton et al., *The Role of Dietary Fiber in Satiety, Glucose, and Insulin: Studies with Fruit and Fruit Juice*, 34 AM. J. CLINICAL NUTRITION 211 (1981); Diane M. DellaValle et al., *Does the Consumption of Caloric and Non-Caloric Beverages with a Meal Affect Energy Intake?*, 44 APPETITE 187 (2005); D. P. DiMaggio & R. D. Mattes, *Liquid Versus Solid Carbohydrate: Effects on Food Intake and Body Weight*, 24 INT’L J. OBESITY 794 (2000); G. B. Haber et al., *Depletion and Disruption of Dietary Fibre: Effects on Satiety, Plasma-Glucose, and Serum-Insulin*, 310 LANCET 679 (1977); Jessica N. Kuzma et al., *No Difference in Ad Libitum Energy Intake in Healthy Men and Women Consuming Beverages Sweetened with Fructose, Glucose, or High-Fructose Corn Syrup: A Randomized Trial*, 102 AM. J. CLINICAL NUTRITION 1373 (2015); R. D. Mattes, *Beverages and Positive Energy Balance: The Menace Is the Medium*, 30 INT’L J. OBESITY S60 (2006); D. M. Mourao et al., *Effects of Food Form on Appetite and Energy Intake in Lean and Obese Young Adults*, 31 INT’L J. OBESITY 1688 (2007); An Pan & Frank B. Hu, *Effects of Carbohydrates on Satiety: Differences Between Liquid and Solid Food*, 14 CURRENT OPINION CLINICAL NUTRITION & METABOLIC CARE 385 (2011).

⁷⁰ THE COCA-COLA CO., 2014/2015 SUSTAINABILITY REPORT 10 (2015), <http://goo.gl/E4N5gM> (last visited Sept. 16, 2016).

⁷¹ Notably too, Coke’s extravagant spending belies Coke’s Forward Looking Statements, which clearly minimize the impact of “obesity concerns.” E.g., The Coca-Cola Co., Current Report (Form 10-K), at 38 (Feb. 9, 2016).

⁷² THE COCA-COLA CO., 2014/2015 SUSTAINABILITY REPORT 8, 11 (2015), <http://goo.gl/E4N5gM> (last visited Sept. 16, 2016).

Illustrations 4 & 5



90. Beginning in May 2013, Coca-Cola introduced its “Get the Ball Rolling” program which hosted events it claimed were aimed at “bringing together happiness and movement in a way that only The Coca-Cola company can.”⁷³ According to a story posted on the company’s website, the program’s activities “build on our Company’s global commitments to help fight obesity and be part of the solution,” and involved seeking partners “to help address obesity in every community we serve.”⁷⁴ In its first year of operation, the company co-hosted “Get the Ball Rolling” events (targeted at children) with organizations such as the Boys & Girls Clubs of America, National Foundation for Governors’ Fitness Councils, NASCAR, and many others.⁷⁵ Coca-Cola continues to fund and promote the program.

⁷³ Stuart Cronauge, Coca-Cola USA Sets Goal To Inspire Americans To Rediscover The Joy Of Activity, COCA-COLA (May 13, 2013), <http://www.coca-colacompany.com/press-center/press-releases/coca-cola-gets-the-ball-rolling-for-a-fun-active-summer>.

⁷⁴ *Id.*

⁷⁵ Caren Pasquale Seckler, How Has Coca-Cola Inspired More Than 3 Million People To “Get The Ball Rolling”? COCA-COLA (Sept. 23, 2013), <http://www.coca-colacompany.com/coca-cola-unbottled/how-has-coca-cola-inspired-more-than-3-million-people-to-get-the-ball-rolling>.

91. Through the ABA, Coca-Cola also subsidized the 2016 Childhood Obesity Prevention Awards. These high-fanfare grants are given by the U.S. Conference of Mayors to six cities for their activity-focused nutrition programs.⁷⁶

92. In widely promoting these exercise programs, Coca-Cola proclaimed that “[w]ell-being is integral part of our business—from the communities we serve to the people we refresh. Our well-being commitments serve as a guide for our global efforts . . . with an end goal to inspire happier, healthier lives.”⁷⁷

93. Coca-Cola and the ABA also promoted a program called the “Balance Calories Initiatives,” which, according to a Coca-Cola press release, “encourages people to balance all of their calories – including beverages – with daily physical activity.”⁷⁸ Susan K. Neely, President and CEO of the ABA emphasized the collaborative nature of the project, noting that the common goal of “health and wellbeing of communities across the country” overrides the normally competitive nature of commercial interests, joining all the members of the Association.⁷⁹

94. Coca-Cola paid nutritionists, too, to blog about balance and sugar-sweetened beverages as healthy snacks.⁸⁰

⁷⁶ U.S. Conference of Mayors, *Six Cities Share \$445,000 in Grants to Support Childhood Obesity Prevention Programs*, PR NEWswire (Jan. 21, 2016), <https://goo.gl/X4IpQ7>; Press Release, Am. Beverage Ass’n, *Six Cities Share \$445,000 in Grants to Support Childhood Obesity Prevention Programs* (Jan. 21, 2016), <https://goo.gl/nS7Tkb> (last visited Sept. 15, 2016); see also Press Release, Coca-Cola Co., *The Coca-Cola Foundation Awards \$8.1 in Third Quarter Benefitting 3.8 Million People Worldwide* (Oct. 18, 2013), <https://goo.gl/SZRYkE> (promoting Coca-Cola Foundation’s funding of foreign childhood obesity programs) (last visited Sept. 15, 2016).

⁷⁷ THE COCA-COLA CO., 2014/2015 SUSTAINABILITY REPORT 8 (2015), <http://goo.gl/E4N5gM> (last visited Sept. 16, 2016).

⁷⁸ Journey Staff, *Coca-Cola Joins America's Beverage Companies and the Alliance for a Healthier Generation in Landmark Partnership to Promote Healthy Lifestyles*, Coca-Cola (Sept. 26, 2014), <http://www.coca-colacompany.com/coca-cola-unbottled-old/coca-cola-joins-america-beverage-companies-and-the-alliance-for-a-healthier-generation-in-landmark-partnership-to-promote-healthy-lifestyles>.

⁷⁹ *Id.*

⁸⁰ Candice Choi, *Coke as a Sensible Snack? Coca-Cola Works with Dieticians Who Suggest Cola As A Snack*, STAR TRIBUNE (Mar. 16, 2015), <https://goo.gl/2t44MM>.

95. For example, in her list of “sensible snacks for any time of day,” Robyn Flipse equated Coca-Cola mini-cans with packs of almonds.⁸¹ And in interviews, Dr. Rani Whitfield similarly promoted drinking Coca-Cola mini-cans as part of a healthy, balanced diet, commenting, “70 calories and my taste buds love it!”⁸² In addition to deceiving on nutrition, Ms. Flipse also missed on figures: Mini-cans of Coca-Cola have 90 calories.

96. To respond to the scientific consensus that sugar-sweetened beverages have no nutritional value, Coca-Cola made claims that its sugar-sweetened beverages aren’t “empty calories” but are sources of “essential hydration.”

97. According to its Senior Vice President Katie Bayne, “What our drinks offer is hydration. That’s essential to the human body. We offer great taste and benefits whether it’s an uplift or carbohydrates or energy. We don’t believe in empty calories. We believe in hydration.”⁸³

98. Coca-Cola’s [now-departed] Chief Science and Health Officer, Rhona Applebaum, routinely made similar claims like, “We started with one beverage that I personally am very proud of. It’s safe, it hydrates, it’s enjoyable.”⁸⁴

99. Even Coca-Cola’s website promotes the “science” of hydration with links to “Food Insight” publications—“Your Nutrition and Food Safety Resource”—produced by the International Food Information Council Foundation (“IFIC”). These publications stress the importance of hydration “whether you’re an elite athlete . . . or more the spectator type,” though

⁸¹ Robyn Flipse, *Every Day Heart Health in February and Beyond*, NUTRITION COMMC’N SERVS. (Feb. 19, 2015), <https://goo.gl/Pu5q5W> (last visited Sept. 15, 2016).

⁸² *Get Well Wednesday: Dr. Rani Whitfield Answers Your Questions About Prioritizing Health*, BlackAmericaWeb.com, <https://goo.gl/oAouCD> (last visited Sept. 15, 2016) (transcript of radio interview). Coca-Cola reported paying health professionals and scientific experts a total of \$2.3 million for “travel grants, related expenses and professional fees” between 2010 and 2015. *List of Health Professionals and Scientific Experts*, THE COCA-COLA CO. (Mar. 24, 2016), <https://goo.gl/VRU3BW> (last visited Sept. 15, 2016).

⁸³ *Coke Executive Answers Questions About Sugary Drinks*, USA TODAY (June 7, 2012), <http://goo.gl/OWgFs> (statement made by Coke executive Katie Bayne during interview).

⁸⁴ Canadian Obesity-Network, *COS2013 Symposia - Coca Cola - Dr. Rhona Applebaum*, YOUTUBE (May 29, 2013), <https://goo.gl/I1SK6M> (comments made by Dr. Rhona Applebaum, during presentation at Canadian Obesity Network’s 2013 symposia) (17:55) (last visited Sept. 15, 2016).

1 almost no Americans are under-hydrated. More, IFIC emphasizes that with respect to hydration,
 2 “the term ‘water’ can mean more than just plain drinking water. . . . It includes . . . beverages
 3 such as soft drinks”⁸⁵

4 100. Coca-Cola financially supports the IFIC, but this is not indicated in IFIC
 5 publications.⁸⁶

6 101. The reasonable implication of this Coca-Cola and Coca-Cola-sponsored message
 7 is that the “essential hydration,” as offered by sugar-sweetened beverages, is good for the body.

8 102. More than half of the US population drinks soda on a daily basis.⁸⁷ More than
 9 half of the world’s population has had a Coke.⁸⁸ But untold millions are unaware of the health
 10 consequences of frequent consumption of a product billed as “essential hydration.”

11 103. In fact, scientific consensus is that frequent hydration by way of sugar-sweetened
 12 beverages is linked to obesity, diabetes, cardiovascular disease, and other chronic diseases.
 13 These beverages are not “*essential*,” or even advisable, for the human body; they are antithetical
 14 to well-being of the body if consumed routinely.

15 C. Advertising to Minors

16 104. Despite a pledge not to do so,⁸⁹ Coca-Cola continues to target children with its
 17 advertising for sugar-sweetened beverages.

18 105. Advertising messages for sugar-sweetened beverages are all-pervasive, appearing
 19 on billboards, buses, trains, magazines, newspapers, twitter, BUZZFEED, etc.

20 106. The goal of Coca Cola’s advertising is to convey to young people that sugar-
 21 sweetened beverages are desirable, safe, healthy and prevalent in society.

24 ⁸⁵ INT’L FOOD INFO. COUNCIL FOUND., HYDRATION: DOES IT ALWAYS HAVE TO BE WATER?, at 1
 (2011), <https://goo.gl/95XDIB> (last visited Sept. 15, 2016).

25 ⁸⁶ *See, e.g., id.*

26 ⁸⁷ Willett Report, *supra* note 8, at ¶ 8.

27 ⁸⁸ Muhtar Kent, *A Letter from Our Chairman and Chief Executive Officer*, THE COCA-COLA CO.
 (May 4, 2015), <http://goo.gl/yzdOHj>.

28 ⁸⁹ *Responsible Marketing*, THE COCA-COLA CO. (Sept. 25, 2015), <https://goo.gl/pPZfr> (last
 visited Sept. 15, 2016).

107. Despite its pledge not to do so, Coca-Cola continues to target children with a material segment of its advertising. Like the tobacco industry, Coca Cola needs to replenish the ranks of its customers, and it tries to recruit them young.

108. To attract young consumers to their sugar-sweetened beverages, for example, Coca Cola has used cartoons, celebrities, over 300 apps, billboards at sponsored events, and otherwise has massively disseminated other consumer products branded with Coca-Cola. The advertising has been effective in attracting children and adolescents.

III. PLAINTIFF HAS EXPENDED CONSIDERABLE RESOURCES COMBATTING DEFENDANTS' MISINFORMATION CAMPAIGN ABOUT SUGAR-SWEETENED BEVERAGES THAT IT COULD AND WOULD HAVE ALLOCATED ELSEWHERE.

109. Aware of the momentous health consequences of sugar-sweetened beverage consumption—that is, their link to the rising epidemics of obesity, type 2 diabetes, and cardiovascular disease—Plaintiff has been forced to expend substantial resources attempting to educate the public and policy-makers about sugar-sweetened beverages, including the inaccuracy of Defendants' messages on the science of sugar-sweetened beverages, the need for enhanced regulation and transparency, and reduction in consumption.

110. Aware that consumers purchase Coca-Cola sugar-sweetened beverages believing them to be part of a healthy diet, not linked to obesity, and/or good sources of hydration, and the like, relying on Defendants' deceptive representations, and that consumers would not have purchased them had they known the truth, Plaintiff has been forced to expend substantial resources attempting to educate the public and policy-makers about sugar-sweetened beverages, including the inaccuracy of Defendants' messages on the science of sugar-sweetened beverages, and the need for reduction in consumption and marketing transparency.

111. Plaintiff has allocated significant resources to support advocacy about sugar-sweetened beverages, including through its major initiative on obesity prevention for children aged 0-5. In addition to providing educational materials, this initiative includes frequent keynotes and speeches by Plaintiff's staff, including its Executive Director, and participation in

1 material conferences addressing the determinants of obesity, including SSBs, and rebutting
2 information disseminated by Coca-Cola and the ABA.

3 112. Plaintiff also serves on the national advisory committee for Voices for Healthy
4 Kids, and on the Advisory Board for Open Truth, which seeks to increase awareness of the
5 negative impacts of sugar-sweetened beverages on health and seeks to expose non-transparent
6 and manipulative marketing techniques by Defendants. Its Executive Director, Xavier Morales,
7 serves on the Berkeley Sugar-Sweetened Beverage Commission, which makes investment
8 recommendations for the Berkeley City Council relating to programs that aim, in key part, to
9 educate the public about the risks of routine consumption of sugar-sweetened beverages.

10 113. Plaintiff has allocated substantial resources to cover the cost of its advocacy,
11 including for meetings with policy makers in various local and state regulatory bodies.

12 114. The funding that Plaintiff expends on its sugar-sweetened-beverage advocacy
13 efforts requires it to divert resources away from other important public health and nutrition
14 initiatives.

15 115. Each of these resource-intensive activities was untaken prior to and independent
16 of this litigation, and not in furtherance of it.

17 116. If Plaintiff prevails in this litigation, it will no longer need to divert its resources
18 to combat the false and misleading representations and tactics employed by Defendants about
19 sugar-sweetened beverages, and can allocate such resources to other health-based projects.

20 **CLAIMS FOR RELIEF**

21 **FIRST CLAIM**

22 **Violation of the California Unfair Competition Law, 23 CAL. BUS. & PROF. CODE § 17200 *et seq.***

24 117. Plaintiff realleges and incorporates by reference the allegations in each of the
25 preceding paragraphs of this Complaint.

26 118. Cal. Bus. & Prof. Code § 17200 (the “UCL”) prohibits any “unlawful, unfair, or
27 fraudulent business act or practice.” Defendants have engaged in unlawful, unfair, and
28 fraudulent business acts and practices in violation of the UCL.

119. Defendant Coca-Cola has violated the unlawful prong of the UCL by virtue of its violations of the False Advertising Law (“FAL”), as described below.

120. Defendants have violated the unfair prong of the UCL because the acts and practices set forth herein offend established public policy supporting truth in advertising to consumers. Defendants’ conduct is immoral, unethical, oppressive, unscrupulous, and injurious to consumers. The harm that these acts and practices cause to consumers greatly outweighs any benefits associated with them. Defendants’ conduct also impairs competition within the beverage industry.

121. Defendants have violated the fraudulent prong of the UCL because their material misrepresentations and omissions were likely to deceive a reasonable consumer and the true facts would be material to a reasonable consumer.

122. As alleged herein, Defendants’ advertising and public relations campaigns create the false impression that there is no link between consumption of sugar-sweetened beverages and obesity, diabetes, cardiovascular disease, or other related conditions, that sugar-sweetened beverages are a healthy component of any diet when “balanced” with some activity, and that drinking beverages to hydrate is “essential” to human health and that sugar-sweetened beverages are a good source of hydration.

123. Defendants have represented to the consumer public, and to those who advance and protect their health, that they were disclosing objective, unbiased scientific facts about the health consequences of consuming sugar-sweetened beverages when they were not.

124. Defendants have made and continue to make representations and statements about the safety of sugar-sweetened beverages and their effect on human health. These representations and statements have been materially false, incomplete, and fraudulent at the time Defendants made them, and Defendants knew or had reason to know of their falsity.

125. At all relevant times, Defendants intentionally, willfully, or recklessly misrepresented or failed to disclose material facts about the health consequences of regularly consuming sugar-sweetened beverages, including their link to obesity, type 2 diabetes, and cardiovascular disease.

126. Defendants' knowledge of the material facts about sugar-sweetened beverages was and is superior to that of the consumer public.

127. By expressly raising the issue of sugar-sweetened beverage safety and denying any link between sugar-sweetened beverages and obesity, type 2 diabetes, and cardiovascular disease, and in addition making false statements about this issue, Defendants had a duty to reveal all the material facts of which they had notice, in order not to deceive and mislead the consumer public.

128. Defendants' disclosure of fragmentary information and half-truths and suppression of relevant facts constitutes actionable misrepresentation under the UCL.

129. Defendants undertook such misrepresentations in order to induce the consumer public to purchase and continue to purchase sugar-sweetened beverage products and raise profits.

130. By virtue of their affirmative misconduct, Defendants had a duty to disclose that the scientific consensus is that: a) sugar-sweetened beverages are linked to obesity, type 2 diabetes, and cardiovascular disease; b) activity does not "balance" away, or negate, the link between sugar-sweetened beverages and obesity-related chronic diseases; and c) hydration with sugar-sweetened beverages is not healthful or "essential" to the human body. They also had a duty to disclose all other material facts about the potential health hazards of sugar-sweetened beverage consumption of which they had notice.

131. Defendants' omissions are material because reasonable consumers would consider the omitted science linking sugar-sweetened beverages to chronic disease to be important in determining whether or not to purchase sugar-sweetened beverages.

132. Reasonable consumers were likely to be deceived, and were in fact misled, by Defendants' misrepresentations and omissions. Reasonable consumers relied on Defendants' actions.

133. Coca-Cola knows or reasonably should have known that the promotion, marketing and sale of its sugar-sweetened beverages was and is deceptive.

134. Plaintiff has suffered injury in fact as a result of Defendant’ unlawful, unfair, and/or deceptive practices because Plaintiff has incurred costs and diverted resources educating the public and public servants about Defendants’ material misrepresentations and omissions.

135. Moreover, as a direct and proximate result of Defendants’ fraudulent misrepresentations and active concealment, the consumer public has suffered and will continue to suffer substantial injuries.

136. All of the wrongful conduct alleged herein occurred, and continues to occur, in the business of selling sugar-sweetened beverages. Defendants’ wrongful conduct is part of a general practice that is still being perpetuated and repeated throughout the State of California and nationally.

137. Plaintiff requests that this Court enter such orders or judgments as may be necessary to enjoin Defendants from continuing their unfair and deceptive business practices, and to provide such other relief as set forth below.

SECOND CLAIM

Violations of the California False Advertising Law, CAL. BUS. & PROF. CODE § 17500, *et seq.*

138. Plaintiff realleges and incorporates by reference all paragraphs alleged herein.

139. California Business & Professions Code §§ 17500, *et seq.* (the “FAL”), broadly proscribes deceptive advertising in this State. The FAL makes it unlawful for any corporation or association intending to sell products or to induce the public to make purchases to make any statement in connection therewith which is untrue or misleading, and which is known, or which by the exercise of reasonable care should be known, to be untrue or misleading.

140. When a corporation or association has a duty to disclose material facts about a product or about potential purchases of a product, representations to consumers without disclosure of such material facts violates the FAL.

141. As alleged herein, Coca-Cola’s advertising and both Defendants’ promotion of sugar-sweetened beverages creates the impression that their consumption is not linked to obesity, type 2 diabetes, and cardiovascular disease, that it can be “balanced” with activity so as to be

1 healthful, and that it provides “essential” and healthful hydration. Defendants failed to disclose
2 in their promotion and advertising campaigns that scientific consensus about sugar-sweetened
3 beverages is to the contrary of each of these claims when they had a duty to make such
4 disclosure.

5 142. Defendants’ misrepresentations and omissions are material because reasonable
6 consumers would consider the omitted facts to be important in determining whether or not to
7 purchase sugar-sweetened beverages.

8 143. Reasonable consumers were likely to be deceived, and were in fact misled, by
9 Defendants’ misrepresentations and omissions.

10 144. Defendants know or reasonably should have known that statements they made in
11 the promotion, marketing and sale of sugar-sweetened beverage products were and are deceptive.

12 145. Plaintiff has suffered injury in fact as a result of Defendants’ unlawful, unfair,
13 and/or deceptive practices because Plaintiff has been required to incur costs and divert resources
14 educating the public and policy makers about the inadequacy and misleading nature of
15 Defendants claims and material omissions about sugar-sweetened beverages.

16 146. All of the wrongful conduct alleged herein occurred, and continues to occur, in
17 the business of selling sugar-sweetened beverages. Defendants’ wrongful conduct is part of a
18 general practice that is still being perpetuated and repeated.

19 147. Plaintiff requests that this Court enter such orders or judgments as may be
20 necessary to enjoin Defendants from continuing their false advertising and other false statements,
21 and provide such other relief as set forth below.

22 **THIRD CLAIM**

23 **Intentional Breach of Special Duty**

24 148. Plaintiff realleges and incorporates by reference all paragraphs alleged herein.

25 149. Defendants assumed a special duty to protect the consumer public when they
26 actively misrepresented that the wellbeing of consumers was an industry priority and that the
27 science they presented was objective, reliable, and demonstrated no link between sugar-
28 sweetened beverages and obesity, type 2 diabetes, and cardiovascular disease.

1 150. Defendants also undertook a special duty by funding and organizing deceptive
2 exercise-focused campaigns around California, the United States, and globally.

3 151. Continuing to date, Defendants' spokespersons have repeatedly announced that
4 research is underway showing that sugar-sweetened beverages and obesity, type 2 diabetes, and
5 cardiovascular disease are not linked, and moreover that obesity is caused instead by lack of
6 exercise and "balance." These actions were and remain a part of Defendants' campaign of
7 disinformation designed to obscure the evidence that sugar-sweetened beverages are linked to
8 obesity, type 2 diabetes, and cardiovascular disease.

9 152. Defendants did not make these representations gratuitously, rather, they were
10 made to combat the emerging scientific consensus about the consumption of sugar-sweetened
11 beverages and, more specifically, to protect profits from the sale of sugar-sweetened beverages.

12 153. Defendants also represented that the well-being of their consumers was one of
13 their primary concerns.

14 154. Further, Defendant Coca-Cola represented repeatedly that it does not advertise to
15 children.

16 155. Each of these undertakings was designed to, among other purposes, cause
17 consumers to believe that they could continue to consume sugar-sweetened beverages on a
18 routine and often daily basis healthfully.

19 156. In making these representations, Defendants assumed duties to the public and
20 Plaintiff.

21 157. Defendants had a duty to disclose the whole truth about the link between sugar-
22 sweetened beverages and obesity, diabetes, and cardiovascular disease, and, by extension, the
23 truth about the science of "balance." Defendants breached this duty.

24 158. Defendants could have reasonably foreseen the risk of harm to Plaintiff and the
25 public. Defendants knew and/or could foresee that their actions would result in continued
26 substantial consumption of sugar-sweetened beverages by the public and/or large portions
27 thereof—especially children and less-educated populations and consumers.

28

159. The very purpose behind the assumption of this duty was simultaneously to promote the purchase and consumption of sugar-sweetened beverages, and to prevent or delay regulatory activities designed to curb such purchase and consumption.

160. Defendants' intentional breach of their assumed duties therefore influenced the conduct of Plaintiff to its detriment.

161. As a direct, foreseeable, and proximate cause of Defendants' intentional breach of their specially assumed duties, the public continued to consume sugar-sweetened beverages when they would not otherwise, and Plaintiff has been forced to expend and divert its resources to fight these trends and inform consumers of the truth.

FOURTH CLAIM

Negligent Breach of Special Duty

162. Plaintiff realleges and incorporates by reference all paragraphs alleged herein.

163. Defendants knew or should have known that the special duties that they assumed were important to consumer and to Plaintiff, and their failure to carry out these duties would substantially increase the risk of harm to Plaintiff.

164. Defendants have breached and continue to breach their special duties, have failed to exercise reasonable care in the performance of their special duties, and this has substantially increased the risk of harm to Plaintiff.

165. As a direct and proximate result of Defendants' negligent breach of their specially assumed duty of care, Plaintiff has suffered and continue to suffer substantial injuries for which it is entitled to recover.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter a judgment against Defendants and in favor of Plaintiff, as follows:

A. Declare, adjudge and decree the conduct of Defendants as alleged herein to be unlawful, unfair, and/or deceptive, and in violation of the Unfair Competition Law;

B. Declare, adjudge and decree the conduct of Defendants as alleged herein to be a violation of the Fair Advertising Law;

1 C. Declare, adjudge and decree the conduct of Defendants as alleged herein to be a
2 violation of their special duties;

3 D. Enjoin Defendants from continuing the unfair and deceptive promotion,
4 marketing and sale of sugar-sweetened beverages, including any claim that sugar-sweetened
5 beverages are not linked to obesity, diabetes, or cardiovascular disease;

6 E. Enjoin Defendant Coca-Cola from continuing the promotion, marketing and sale
7 of its sugar-sweetened beverages to children under 12, directly or indirectly;

8 F. Require Defendants to disclose, disseminate, and publish all research previously
9 conducted, directly or indirectly, through agents, affiliates, officers, directors, employees, and all
10 persons acting in concert with them, that relates to the impact of sugar-sweetened beverage
11 consumption on health;

12 G. Require Defendants to disclose, disseminate, and publish all research previously
13 conducted, directly or indirectly, through agents, affiliates, officers, directors, employees, and all
14 persons acting in concert with them, that relates to the impact of exercise on health and obesity,
15 as contrasted with consumption of sugar-sweetened beverages, or any other caloric intake;

16 H. Require Defendants to fund a corrective public education campaign to reduce the
17 consumption of sugar-sweetened beverages;

18 I. Require Defendants to prominently post on their websites that the consumption of
19 sugar-sweetened beverages can lead to obesity, diabetes, and cardiovascular disease.

20 J. Award Plaintiff reasonable attorneys' fees and costs; and

21 K. Award Plaintiff such other further and different relief as the nature of the case
22 may require or as may be determined to be just, equitable, and proper by this Court.

JURY TRIAL DEMAND

Plaintiff demands a jury trial on all causes of action so triable.

Date: January 17, 2017

Respectfully submitted,

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